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Effects of a Conscious Breathing Intervention on Emotion and Energy Flow

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Effects of a Conscious Breathing Intervention on Emotion and Energy Flow

Amy Heath, Heather Mashuga, and Ann Arens

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May 20, 2015

Abstract

The breath is a powerful internal resource that is within conscious control. Theories in the literature indicate unconscious breathing patterns can suppress emotion and restrict energy flow, however, the effects of conscious breathing on these elements are not well understood. The purpose of this study is to describe the effects of a conscious breathing intervention on emotion and energy flow. We used a quasi-experimental design, and conducted three individual case studies on ourselves over 6 weeks. We collected qualitative data, which included professional aura and chakra readings, photographs, body scan diagrams, journals, and third party observation forms. We performed within-case and cross-case thematic data analysis. Results suggest conscious breathing increases groundedness, interconnection, confidence, and spiritual growth, as well as facilitates emotional surfacing and release. Positive changes in energetic patterns over the course of 6 weeks suggest that conscious breathing may also increase energy flow. Our study provides important preliminary information for the role conscious breathing may play in the treatment of physical and emotional ailments. While our results seem promising, a future longer-term experimental study with a larger, more representative sample size is warranted.

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Introduction

There is a living synergy in the body between breath, emotion, and energy. They are so intricately connected that it often goes unnoticed in one's daily life. Breathing sustains life. Humans can go for weeks without food and days without water, but only precious minutes without oxygen (Hendricks, 1995). The average person takes approximately 20,000 breaths a day and more than 100 million breaths throughout a lifetime (Hendricks, 1995). The way in which one breathes is affected by how one feels. Breathing patterns change when emotions change. The short sobs of sadness, the rapid pant of excitement, or the deep grunts of frustration are all examples of how the breath is affected by emotion. If the state of emotion can change the breath, then it makes sense that by changing the breath one can control the state of emotion.

Life would not exist without the breath that carries vital components to every cell of the body, nor would life exist without the constant flow of energy within and around the body. When looking at health and wellness from a holistic perspective, it is wise to be conscious of the breath and how it impacts all areas of the mind, body and spirit. Unconscious breathing patterns can lead to suppression of emotion and energy flow, which can manifest with physical, mental, and emotional symptoms (Mann, 1973). When the breath is regular and free, the body is able to receive the many vital components of the breath, and the energy within the body is able to flow freely (Mann, 1973). Free-flowing breath and energy enables the promotion of mental, physical, emotional, and spiritual well-being (Acharya, 2011). The breath is in our conscious control and serves as an anchor to help one become aware of the dimension of emotion and energy in the body. In order to demonstrate this connection, take a moment to become aware of your breath.

Consciously breathe faster. Take quick and shallow breaths using your chest and mouth to move the air. How do you feel? Now slow down your breath. Make your breath deeper. Allow it to flow smoothly in and out through your nose. How do you feel now? Imagine having a free, easily accessible resource that could have a profound impact on your life. This internal resource is your breath.

The connection between breath, emotion, and energy has historical roots in ancient Eastern cultures, but is less understood from the Western perspective. Eastern philosophies even considered how the interplay of these three elements could bring about health and well-being (Mann, 1973). Studies on conscious breathing and its effects on our health are showing promising results and gaining more acceptance by Western researchers (Young, Cashwell, & Giordano, 2010). Conscious breathing includes being mindful of the breath and controlling the breath through the use of numerous breathing techniques (Young et al., 2010). There has been limited research on mindful breathing. The research that has been done focuses on a broad context making the effectiveness of mindful breathing difficult to evaluate. The research on controlled breathing and emotion is promising, but the idea of energy flow is lacking.

The purpose of this research project is to describe the effect of conscious breathing on emotion and energy flow. We begin the project with a review of the current literature examining the relationship between breath, emotion, and energy. We focus our attention on the role of the breath and conscious breathing on emotion and energy flow. Next, we articulate relevant research lenses that have served as guides in the development of this research project. We then thoroughly describe our method in carrying out this research. Next, we report the results of the research project. Finally, we interpret the

findings of our study and discuss implications for holistic health, community, education, and future research.

Literature Review

The purpose of this chapter is to ground our research in the relevant literature. In this case, we review the academic literature on the relationship between breath, emotion, and energy. Due to the lack of published research studies on this topic, our literature review focuses on context and description of theoretical concepts. We first need to define a few essential terms.

The term *breathwork* is often used in the literature as a way of referring to a variety of breathing techniques. These techniques may be stand-alone practices or integrated into other holistic practices such as meditation, yoga, qi gong, tai chi, and other forms of movement. The focus in this literature review is on stand-alone breathwork practices. Hendricks (1995) uses the terms *breathwork* and *conscious breathing* interchangeably. For the purpose of our review, we use the term *conscious breathing* to define any breathing practice that is done with awareness at a conscious level.

Energy is a multidimensional concept that takes many forms. The complex makeup of energy has created a variety of definitions over time and throughout cultures. Energy flows through our bodies as it continually shifts from various places where it is both produced and consumed (Acharya, 2011; Rama, Ballentine, & Hymes, 2010). We define energy as a moving vehicle of life within and around the body. It is a consistent force that gives vitality to the body and mind.

Since we attempt to describe the connection between breath, energy, and emotion, defining emotion is also important. Rosenberg (1998) describes emotion as “a form of energy in motion” (p. 127). We adopt this definition.

We begin our literature review with a comprehensive overview of breath. We then

discuss the concept of energy. In the next section, we establish a theoretical connection between breath, emotion, and energy. We follow with discussion of the relevant research on the effect of conscious breathing on emotion and energy flow. We conclude this chapter with a summary and our research question.

Breath

Breathing is a vital part of life and has many components, which we discuss in this section. We review the qualities of breath including breath holding, location of breathing, mouth versus nose breathing, depth, rate, and sound of the breath. We then examine the literature related to conscious breathing including a comparison of controlled breathing and mindful breathing.

Qualities of breath. The qualities of breath are the essence of the breathing pattern and include breath holding, location of breathing, mouth versus nose, depth, rate, and sound (Gilbert, 1998). Breath holding often occurs when extra awareness is drawn to sensory input. There is a tendency to still the body to maximize awareness. For example, breath holding is often an automatic response while listening for a sound or experiencing emotions of fear and surprise. Breath holding interrupts the continuous flow of oxygen, and the system can be thrown out of whack, causing tension and fatigue (Gilbert, 1998). According to Rama et al. (2010), the breath should be smooth, uninterrupted, and without any pauses.

Location of breathing refers to where breathing occurs (diaphragm or chest). Inhalation occurs most often in two ways: moving the diaphragm downwards (diaphragmatic breathing) and expanding the walls outwards (chest breathing) (Gilbert, 1998; Rama et al., 2010). During exhalation the lungs and the structures around them

return to their normal positions (Rama et al., 2010). From a physiological standpoint, since there is more blood circulating in the lower portion of the lungs than the upper portion, diaphragmatic breathing is the most efficient. Since the chest is further from the lower portion of the lungs, chest breathing requires more work to exchange gases, thus requiring more breaths (Gilbert, 1998; Rama et al., 2010). Deeply breathing into the stomach regulates the supply of oxygen and vital energy in order to activate and cleanse the whole body, which maintains health (Acharya, 2011). Another advantage to diaphragmatic breathing is that it naturally massages the surrounding internal organs, which promotes circulation (Gilbert, 1998). This advantage is lost in chest breathing, and constant use of the chest muscles for inhalation can result in pain and tension.

Chest breathing is associated with the fight or flight response (“Breath control,” 2006; Rama et al., 2010). This is the body’s natural response to stress and danger. During the fight or flight response, the body tenses, breath and heart rate increases, and oxygen is taken in quicker through the mouth and the chest muscles. This stress response is hard on the body and mind, and is intended to be used only when danger is detected or survival is threatened. When the fight or flight response is activated by less threatening, everyday occurrences, many physical and emotional health problems such as high blood pressure and anxiety can result. Diaphragmatic breathing does just the opposite of this, and elicits the relaxation response, thus slowing the heart rate, lowering the blood pressure, and calming the emotions (“Breath control,” 2006; Rama et al., 2010).

Another important quality in the breath is whether one breathes through the mouth or through the nose. According to Hendricks (1995), breathing through the mouth is not good for the body. The nasal cavity is specifically designed with structures that help

filter, warm, and moisten the air that we inhale to help prepare it for the lungs. Inhaling through the mouth bypasses all of these important structures. As mentioned above, mouth breathing is associated with the fight or flight response and anxiety. Breathing through the nose requires more work, but allows for more efficient exchange of oxygen, more control over the breath, and is ideal for everyday routine (Douillard, 1994).

The depth, rate, and sound of the breath are also important factors in breathing. According to Acharya (2011) and Rama (2008), the breath should be deep, slow, even, and silent. Rama states that the breath and the mind depend on each other. If the breath is distracted with jerks, sounds, and irregularities, then the mind is also distracted. When the breath flows, the body flows. And when the body flows, the mind flows (Rama, 2008).

The qualities of breath are the essence of the breathing pattern and include breath holding, location of breathing, mouth versus nose, depth, rate, and sound. Conscious breathing utilizes these characteristics through different techniques. Next, we discuss conscious breathing.

Conscious breathing. Conscious breathing is any breathing practice that is done with conscious awareness. On a deeper layer, “The process of breathing consciously, fully, and deeply can bridge the conscious and unconscious mind, allowing for emergence and exploration of transparent beliefs while facilitating the full experience and expression of all emotions” (Young et al., 2010, p. 115). Research on conscious breathing is discussed in a later section. We further define two types of conscious breathing: controlled breathing and mindful breathing.

Controlled breathing includes a variety of breathing practices that involve specific interventions to the qualities of one’s current breathing pattern. Examples of controlled

breathing techniques include diaphragmatic breathing, Sudarshan Kriya Yogic breathing, pranayama breathing techniques, Alba Emoting, and Nishino breathing method, as well as any basic breathing technique that involves consciously changing the rhythm of the breath in any way. For the purpose of this literature review, we will lump these together and use the term controlled breathing to refer to any of the above techniques.

Mindful breathing describes a breathing practice that involves awareness of the breath without attempting to change it. The concept of mindfulness encompasses a broader attitudinal foundation that includes non-judgment, patience, beginner's mind, trust, non-striving, acceptance, and letting go (Kabat-Zin, 2009). Since deep breathing is good for the body, the human tendency might be to try to control the breath in order to reap these benefits (Rosenberg, 1998). However, mindful breathing instruction is to let the breath be as it is, to simply observe and feel the sensation of the in-breath and out-breath. The idea is to surrender to the process of breathing itself, and not consciously try to change anything about the breath. Mindful breathing will naturally lead to a deeper, fuller, and calmer breath all on its own. Positive physical and psychological effects take place through the process of letting go (Rosenberg, 1998).

Conscious breathing includes both controlled breathing (manipulating the breath) and mindful breathing (awareness of the breath without changing it). Next, we discuss the element of energy.

Energy

Energy is the basis of life and is a remarkable force that is vital to the human body (Acharya, 2011; Mann, 1973). Different forms of energy exist in this world and affect organisms: electric energy, magnetic energy, ultraviolet energy, electromagnetic waves

and particles, radiation, static electricity, and ionized particles, to name a few (Mann, 1973). Complementary and alternative medicine can use various interventions with these biologic energies in order to aid in the healing process. Some aspects of Western medicine recognize that the body emits energy and is influenced by energy. Many mechanisms in Western medicine use these energies, including electrocardiogram, electroencephalogram, electromyogram, and magnetic resonance imaging (Rindfleisch, 2010). Russian scientists were able to measure and chart force fields surrounding living organisms through the use of an electro-auragram device. They found that, beyond atoms and molecules, all living beings have a body of energy. They also found that health, mood, and character affected the energy force field (Mann, 1973).

In this section, we describe energy within the human body. First, we discuss different types of energy. Next, we delve into the patterns of energy flow where we investigate how energy streams through our body in a variety of ways.

Types of energy. Various cultures and people throughout the world have historically believed in the existence of a life energy. The Japanese kampo system refers to the life energy of the body as *ki* (Mayo Clinic, 2009). The ancient Chinese believe in *chi* energy, which is further identified as two polar energies: *yin* and *yang* (Lowen, 1975). Eastern societies, including China, Japan, and Korea use acupuncture as a healing practice in order to correct the flow of energy along meridians in the body. They observe the rhythm, contraction, expansion, and pulsation of activity within the body and also outside of the body (Mann, 1973). The energy of *prana* has its roots deep in India's history. Prana is understood to be the infinite, all-encompassing energy of the universe and all forms of the universe are sustained by prana energy (Rama et al., 2010). A close

cousin of prana is *pranayama* the science of how to direct the prana within the human body including mental and physical control (Acharya, 2011; Rama et al., 2010). In Hawaii, there are native *kahuna* doctors that use the life energy concept of *mana* in their healing practices. By breathing deeply and visualizing mana, there is a positive effect on well-being, physical strength, senses, and the mind (Mann, 1973).

Hippocrates, as far back as 400 B.C., believed that there was a healing force in nature (Mann, 1973). Paracelsus, a doctor who lived from 1493-1541, claimed:

The vital force is not enclosed in man but radiates within and around him like a luminous sphere and it may be made to act at a distance. It may poison the essence of life (blood) and cause disease, or it may purify it and cause health. (Mann, 1973, p. 86)

Robert Fludd, who was a well renowned English alchemist, physician, and mystic in the 17th century, theorized that an invisible, supercelestial force entered the bodies of living organisms through the breath (Mann, 1973). Anton Mesmer, who lived from 1734 to 1815, developed the theory of animal magnetism. This theory holds that all things in nature are penetrated by a magic or universal fluid that animates the body (Mann, 1973).

Wilhelm Reich, a physician and Freudian trained psychoanalyst, coined the term orgone energy, an energy he claimed exists in the atmosphere and extends through all time and space (Reich, 1972). Orgone energy is drawn in by all living organisms and it can flow from one organism to another. Orgone energy expresses itself through emotions and movement and it promotes well-being and pleasure. All living things inhale and exhale this energy (Reich, 1953). If the orgone energy in the body does not maintain equilibrium, disease and illness will become present (Reich, 1972).

Dr. L. J. Ravitz, a prominent doctor from the mid 1900's, conducted extensive research on electrodynamic force fields. Based on the findings Ravitz concludes that

living energetic systems pulsate independently and communicate with each other (Mann, 1973). Pierrakos came to the same conclusion as Dr. Ravitz; however Pierrakos also found that when deep breathing leads to a vibrating sensation within the body and the intensity of feeling increases, the pulsation of the energy field also increases (Mann, 1973). Due to the power of these energy force fields, when a person receives any type of energy healing they may experience pressure, tingling, vibrations, changes in temperature, and other physical sensations (Rindfleisch, 2010).

Patterns of energy flow. Different qualities of energy exist, as well as different patterns of energy flow inside and around the body. The way that energy flows inside the body is very intricate and complex. Energy fields exist on different levels and in different areas of the body through auras, chakras, channels, and meridians (Rindfleisch, 2010). Practitioners in biofield and energy modalities focus on maneuvering, clearing, balancing, and stimulating the energy in and around the body through many approaches, including breathing techniques (Mayo Clinic, 2009; Rindfleisch, 2010). When energy in the body is balanced and free-flowing, it promotes health, wellness, and wholeness.

The flow of prana through the body is an example of how energy affects human beings as a whole. Rama et al. (2010) explains how yoga masters believe that a consciousness exists beyond the physical body and the mind and energy is what connects them together. There are levels within these connections: the mind alters the flow of prana to affect the body and the body alters the flow of prana to impact the mind. Prana is divided into ten functions, five minor and five major, which it performs in the body, and respiration controls these subtle energies. There is also a network of at least 72,000 nadis, or subtle energy channels, within the body where prana flows, energizes, and sustains the

body (Acharya, 2011; Rama et al., 2010). The three major nadis meet and form seven chakras, or spinning wheels of energy (Rama et al., 2010). The chakras are vitality or energy centers and they each have unique, latent powers (Mann, 1973). Through introspective experimentation, this intricate network of nadis and chakras was discovered and the flow of prana was mapped.

The physical body is built around this network of prana. If there is an imbalance in the flow of prana through any of these nadis and chakras, then disease can occur (Rama et al., 2010). When disease or illness occurs the radiation of vital energy can become tangled and this can block prana from circulating properly. This blockage can cause pain and physical illness (Mann, 1973).

Since the presence and flow of life energy is the basis of our health and well-being, how can we gain some control over this to ensure proper and balanced energy flow? Next, we will discuss the conceptual and theoretical connection between breath, emotion, and energy.

Breath, Emotion, and Energy

The breath serves as a barometer that registers mental condition and external influences on the body (Rama, 2008). Since the breath changes with emotion, tuning into the pattern of breath can indicate current physical and mental state. On the other hand, purposefully manipulating the breathing pattern can lead to conscious control over brain function (Acharya, 2011; Rama et al., 2010).

Although many variables can alter and impact the flow of energy in the body, breath has the most significant impact (Rama et al., 2010). The breath shapes and sustains the patterns of energy within the body. Rama et al. (2010) describe the connection

between energy and breath:

Prana is called the vital link between psyche and soma- “vital” because energy is the very basis of life and vitality. When a person dies, the energy leaves. The body is still there, but the prana departs. Here we return to the matter of the breath because breath is the vehicle for prana. When someone dies and the vital energy departs, we say that person has “expired.” On the other hand, when someone experiences increased mental energy and creativity, we say that person is “inspired.” We indicate through our language an intuitive recognition of the relationship between the inspiration, expiration, and the vital energy necessary for life and creativity. (p. 7)

Rosenberg (1998) describes the body as a dynamic field of energy that can be arranged in a way that feels pleasant or painful. He elaborates even further stating emotions are “a form of energy in motion” (Rosenberg, 1998, p. 127). The energy in these emotional states is very powerful and human nature often leads one to suppress them. Humans often deny, escape, and theorize emotions and rarely allow themselves to be aware of the energy in the moment. Through this suppression not only is the powerful energy within the emotional state lost, but a tremendous amount of energy is wasted trying to hold it down (Rosenberg, 1998). There is incredible value in the energy tied up in negative states. Fear is often the root of many unpleasant feelings. If one can learn how to release this energy then not only do they gain the energy that would have been wasted suppressing the fear, but the energy of the fear itself is also gained. Now this energy can be used at one’s disposal, gathering it together and using it to reach their true potential (Rosenberg, 1998).

The literature contains four theories that connect breath and emotion: classical conditioning theory, cognitive function theory, three fist theory, and character armoring theory. The last two theories take it one step further and also define a connection to energy flow. In all four theories, the breath plays a central role.

Classical conditioning theory. Gilbert (1998) uses classical conditioning theory to explain the connection between breathing patterns and emotion. Inappropriate changes in breathing, such as breath holding and mouth breathing, have been present in humans since primitive times when emotions served the critical role when physical dangers were present (Gilbert, 1998). In today's world, Gilbert (1998) explains how these breathing changes still effect emotions, "Our body's watchdog function is always looking for clues about what will happen next so it can prepare and protect us" (p. 226). As a survival method, the body learns to over prepare itself by changing the breath when similar events occur. After the first fight or flight response, for instance, another event that is less powerful can provoke the same high intensity reaction. Over time the amygdala automates this conditioned response which bypasses the cortex and, therefore, conscious control (Gilbert, 1998). The result being a neutral event may stimulate a much larger first time response. This continuous conditioning can become a person's normal response to both external and internal stimuli. For those that are less flexible and adaptable to their life experiences, these reactions can lead to out of place breathing habits and, ultimately, emotional disorders from phobias, hyperventilation, panic disorder, and dry mouth (Gilbert, 1998).

Cognitive function theory. Chapell (1994) suggests that cognitive function is a mediator between emotions and breathing patterns. The use of negative self-talk causing excessive stress on the body is the basis of this theory. Chapell's (1994) theory suggests that thoughts, silent reading, and demanding cognitive activity all result in fast and shallow respiration. The act of deep diaphragmatic breathing moves the attention away from self-talk and relaxes the muscles of speech, reducing stress (Chapell, 1994). This

research provides strong evidence that self-talk can create a high stress level and chronic dysfunctional breathing. Chapell (1994) highlights the use of deep breathing and the redirection of negative to positive thoughts as a release of anxiety and stress. By disrupting the negative internal thought pattern with deep, regular, diaphragmatic breathing a person's cognitive function can be disrupted and reduced stress and anxiety can be achieved (Chapell, 1994).

Three fist theory. Clinical philosopher Phillip Latey developed the three fist theory in which he uses the analogy of a clenched and unclenched fist to explain the impact of breath, energy, and emotions on muscle tension. A closed fist represents the shutting down of the open transfer of the breath and energy in the body. This emotional stifling often stems from strong emotions, such as rage or fear, along with rapid chest breathing. An unclenched fist signifies the relaxation of a body part after an initial upset of vulnerability or unsteadiness. This opening can provide the body the ability to regain a healthy breathing pattern or open their interpersonal boundaries (Latey, 1996). In this theory, the body is divided into three sections of muscle tension signified by three fists: the lower fist denotes the pelvic girdle, the middle fist includes the lower ribs and upper abdomen, and the upper fist comprises the shoulder girdle to head (Latey, 1996).

As researchers, we focus on the middle fist which relies heavily on breath and its balance of contrasting muscles that tighten and release. The acts of laughing, crying, screaming, and vomiting work as agents of expelling volatile feelings in the second fist's body areas. The stomach also signals difficult emotions through gut feelings, butterflies, and sobbing (Latey, 1996). The freeing of these emotions and the release of our second fist muscles can be done by the use of breath, from yawning to deep breathing (Latey,

1996). Latey (1996) explains, “During treatment there is noticeable transition in breathing range, rhythm, and depth...marked by involuntary sighs releasing both inspiratory and expiratory muscles” (p. 50).

Character armoring theory. Wilhelm Reich’s theory of character armoring describes how the mind and body are deeply linked (Reich, 1973). The basis of Reich’s theory is that people block strong feelings and emotions, and their expression of those feelings and emotions, by habitually tensing their muscles and constricting their breath. The natural flow of energy within a person’s body would become blocked due to the tension of the muscles and the constricted breath (Reich, 1973).

There is a specific way that people stand, hold their mouth and jaw, speak, and breathe, and these physical manifestations are the person’s character or muscle armor (Reich, 1973). The term ‘armor’ is used because the tightened muscles protect the body from painful and threatening emotional experiences along with shielding the person from dangerous internal impulses and external threats (Lowen, 1975). What starts as a defense mechanism becomes an emotional suit of armor (Gilbert, 1999). The energy expressions of the body are blocked as a person builds their armor (Mann, 1973). The physical and character armors are intertwined and suggest how a person has adapted to traumas within their life (Schwartzmann, 2012). Analyzing these manifestations allowed Reich to determine whether a person was healthy or neurotic (Mann, 1973). Reich’s concept of armor can develop anywhere in the body, from muscles, internal organs, and the brain. A person’s character and how they project themselves, from posture to mannerisms, also are exposed to armoring (Schwartzmann, 2012).

One way to analyze character armoring is by monitoring the breath (Gilbert, 1999). Lowen (1975) notes that “There is a common tendency of patients to hold their breath and inhibit exhalation as a means of controlling their feelings” (p. 19). According to this theory, people exchange their natural breathing pattern for control and protection from unwanted emotions. When Reich’s patients were able to unblock the flow of energy through the expression and release of their inhibited emotions, he noticed that their breathing was freer and more natural. Once people breathe more deeply, they experience emotional release and are able to enjoy a much fuller life (Schwartzman, 2012).

Bioenergetics is a form of body psychotherapy. When a person is able to loosen or restrict the muscles in a certain way, they can bring their feelings, memories, and emotions into consciousness so they are able to deal with them (Miller, 2010). Bioenergetic practitioners use techniques to monitor, stimulate, and deepen the breath in order to unblock breath and energy so that the energy can flow and maintain a connection throughout the body (Miller, 2010). They are able to observe the intensity, rate, depth, volume, and regularity of the breath in order to gather information regarding the patient’s emotions and energy blocks. Practitioners have found that when people breathe deeply they tend to feel a tingling or vibrating sensation throughout their bodies. Evidence has shown that locked-up energy and emotions are released, breathing improves, and pleasure intensifies (Mann, 1973).

The four theories discussed in this section connect breath and emotion; the latter two incorporate the element of energy flow. The breath is a key factor in all four theories. Next, we discuss research related to conscious breathing.

Conscious Breathing Research

According to Hendricks (1995), conscious breathing releases stress and tension, builds energy and endurance, and contributes to emotional mastery. Furthermore, conscious breathing prevents and heals physical problems, manages pain, enhances mental concentration and physical performance, and facilitates psycho-spiritual transformation (Hendricks, 1995). In this section we discuss the relevant research on controlled breathing and mindful breathing in relation to emotion and energy.

Controlled breathing. Studies on controlled breathing techniques have been linked to reduced stress (Kimura et al., 2005) as well as relief of anxiety (Brown & Gerbarg, 2005a; Hayama & Inoue, 2012; Peper & MacHose, 1993), depression, everyday stress, post-traumatic stress, and stress-related medical illnesses (Brown & Gerbarg, 2005a). Controlled slow breathing dampens sympathetic nervous system activity and increases activity within the parasympathetic nervous system (Pal, Velkumary, & Madanmohan, 2004). Chow, Wooten, & Leonard (2008) conducted a study exploring controlled breathing with couples, and results indicated a positive impact on spousal relationships as well as individual sense of wellbeing and emotional connection and awareness. Another study conducted on patients on hemodialysis found that using a controlled breathing technique before, during, and after hemodialysis resulted in improvements with fatigue, sleep, anxiety, and pain (Stanley, Leither, & Sindelir, 2011).

A clinical study in the *International Journal of Psychophysiology* investigated the effect of ventilation on emotion and the relationship between respiration and personality (Masaoka & Homma, 1997). The researchers examined this correlation using unpleasant sounds from the environment to evoke unpleasant emotions. The conclusion was a

positive correlation between mental stress and increased respiratory rate, and the results also show a relationship between dysfunctional respiratory patterns and anxiety (Masaoka & Homma, 1997).

Peper & MacHose (1993) performed a clinical study that examined the effects of incomplete exhalation on anxiety. Thirty five subjects were first instructed in a phase of deep diaphragmatic breathing, and then instructed to complete a phase of breathing with exhaling only 70% of the inhaled volume. Anxiety levels were measured before and after each phase. The results showed that during the 70% exhalation phase, anxiety was significantly increased as compared to baseline, and significantly reduced in the deep diaphragmatic breathing phase as compared to baseline, confirming that changes in breathing patterns can affect our emotions (Peper & MacHose, 1993). Another two part study conducted on breathing and emotional states found that joy, anger, fear, and sadness are characterized by distinct breathing patterns, and reproducing those breathing patterns can produce the correlated emotion (Philippot & Chappelle, 2002).

Fast, shallow, irregular, chest breathing is associated with high stress and is linked to hyperventilation and many emotional disorders including panic disorder, agoraphobia, and generalized anxiety disorder. Slow, deep, regular, diaphragmatic breathing is associated with low stress and can be helpful in avoiding hyperventilation and preventing anxiety and panic attacks (Chapell, 1994).

Alba Emoting is another controlled breathing method that uses specific breathing patterns, postures, and facial expressions to help recognize, induce, express, experience, regulate, and transform six basic emotions: joy, sadness, fear, anger, eroticism, and tenderness. The factor that distinguishes these emotions from the others is the unique

breathing patterns that they possess. Several studies have been conducted on the respiratory-posturo-facial patterns of each of the basic emotions and they found that by reproducing these patterns, participant's emotions and heart rates were affected. These studies were able to unblock emotions within the participants, they gave the participants insight on the origins of the emotional blocks, and they also gave the participants the power to express emotions through breathing instead of expressing emotions due to external factors (Kalawski & Pablo, 2013).

Yoga has embraced the relationship between breath and energy for the last 8,000 years. Pranayama breathing techniques can relieve anxiety, depression, chronic pain, and numerous stress-related illnesses (Brown & Gerbarg, 2005a), and they can enhance mood, attention, mental focus, and overall well-being (Brown & Gerbarg, 2005b). Brown & Gerbarg (2005a) explain the connection: "Yogic breathing provides a unique and powerful tool for adjusting imbalances in the autonomic nervous system and thereby influencing a broad range of mental and physical disorders" (p. 190). These breathing exercises allow people to understand prana and, to a certain extent, enable them to control aspects of their mind and body (Rama et al., 2010).

Although these research results are encouraging regarding the positive connection between controlled breathing, emotion, and health, we could not find any research that specifically studied the effect of controlled breathing on energy flow. Furthermore, many limitations exist in these studies; small sample size being the most commonly noted. The amount of well-designed studies on the effects of controlled breathing is limited. Further research on the effect of controlled breathing on emotion and energy flow needs to be done.

Mindful breathing. Emotion and energy are deeply intertwined in mindful breathing practice (Rosenberg, 1998). Rosenberg (1998) describes mindfulness itself as “a subtle energy with transformative power” (p. 68). Through the practice of mindful breathing, emotion may emerge with all its energy and be released and transformed by awareness. This liberation is not something that is forced, in fact that may actually prevent it. The mindfulness practice is to let this happen on its own through the process of letting go and surrendering to the breath. Mindful breathing conditions the body. Just by bringing attention to the breath, without changing it, the qualities of the breath improve. The breath naturally becomes deeper and smoother all on its own, which relaxes the body and allows negative and positive emotional states to emerge (Rosenberg, 1998). The instruction is to allow the energy of these emotional states to blossom naturally and experience it fully. It is when we prevent this blossoming that fear holds its grip. By meeting it head on and not trying to change it, the energy flows through and dissipates on its own. “However it is, that state arises, then passes away. Our attachment fades with it” (Rosenberg, 1998, p. 141). Rosenberg (1998) states that problems are not *solved* through intellect and control, they are *dissolved* through mindfulness and letting go. Suffering *dissolves* because one stops holding on to the energy. It is released and allowed to flow freely (Rosenberg, 1998).

There are very few research studies that specifically evaluate the concept of mindful breathing. Mindfulness meditation often focuses on the breath, but may also encompass other ways to cultivate mindfulness. Mindfulness meditation has been linked to an increase in emotional and physical well-being and quality of life (Majumdar, Grossman, Dietz-Waschkowski, Kersig, & Walach, 2002), enhanced spirituality, increase

in positive health measures, and decrease in depressive relapse and recurrence (Mars & Abbey, 2010). Mindfulness meditation also reduces overall psychological distress (Majumdar et al., 2002; Mars & Abbey, 2010). Most research studies that are published include mindful breathing as a component of a broader Mindfulness Based Stress Reduction (MBSR) program. Studies on MBSR have shown a decrease in mood disturbance and stress (Garland, Tamagawa, Todd, Speca & Carlson, 2013) and may be effective for anxiety and depression (Ando et al., 2009).

These results are promising, however these studies have various limitations: small sample size, difficulty in reliable measures of mindfulness, and lack of a control group. Due to the larger scope of the studies, it is difficult to determine the specific impact of the mindful breathing component. Because of this, no concrete conclusions on the effects of mindful breathing can be established. Furthermore, we could not find any research that specifically studied the effect of mindful breathing on energy flow. Further research on the effects of mindful breathing on emotion and energy flow needs to be done.

Summary and Research Question

Breath, energy, and emotion share an inherent relationship. The breath functions unconsciously, but this free, easily accessible resource is also within our conscious control. Many theories exist discussing the role of habitual unconscious breathing patterns on the suppression of emotion and energy flow within the body (Gilbert, 1999; Latey, 1996; Mann, 1973), but the connection between conscious breathing, emotion, and energy flow is not widely understood. Several research studies connect conscious breathing to improved states of emotion and health (Brown & Gerbarg, 2005a; Hayama & Inoue, 2012; Kimura et al., 2005; Peper & MacHose, 1993; Stanley et al., 2011),

however these studies are limited and the element of energy flow is not addressed. More research needs to be done on the effect of conscious breathing on emotion and energy flow. Therefore, this leads us to ask the question: How does conscious breathing affect emotion and energy flow?

Lenses

The purpose of this chapter is to articulate relevant lenses that have influenced the development of this research project. As researchers, we were the main instruments through which data was collected. We recognize that the spectrum of epistemologies, axiologies, cultures of inquiry, and methodologies in contemporary research are complex and therefore we want to clarify our perspectives in order to remain transparent about our approach to our study. Full disclosure allows for clarity of the assumptions inherent to the research process and the inclusion of this lenses chapter provides the background necessary to articulate why we should be trusted to carry out this study.

First we explain how our research paradigms have shaped this research project. Next, we identify and describe the theoretical framework that guides this research project. Finally, we describe the relevant professional and personal lenses that impact this project as well as how we plan to remain aware of those lenses throughout the research process.

Researcher Paradigms

We ground our research in a pluralistic paradigmatic approach, which brings depth and a balanced perspective to the study. Each researcher describes her paradigm and the role it plays in the research process.

Amy. My research is grounded in between the post positivist and critical paradigms. My behaviors and reactions predominantly reflect the post positivist paradigm; however my values lie more in the critical paradigm. My critical realist ontology and my subjectivist epistemology framed my inquiry approach to this research project. I perceive a common reality that exists, but this reality can never truly be

understood. Although I do see value in both objectivity and subjectivity, it is not possible to completely separate the knower from the known.

These principles informed my approach to the design of this study. Choosing a qualitative case study methodology suited my subjectivist epistemology. Using multiple sources of information and allowing for at least some sense of replicability and generalizability (even if it is limited) through replicable quasi-experimental case study procedures and cross-case study theme analysis was a good fit for my critical realist ontology. Although the post-positivist side of me hesitated to use ourselves as the research subjects, the critical side understood the value and rationale in this decision. My participation as a subject in this research project during the data collection phase strengthened my subjectivist epistemology as it made me question further whether one can truly identify a direct cause and effect with so many interconnected variables, especially in the realm of energy and human physiology and psychology. However, being the researcher in this process brought out and reinforced my post-positivist paradigm roots and behavior patterns, and I found myself desiring objectivity. This brought about an even larger gap in my bi-paradigmatic mindset, and I was aware of this internal conflict. For example, although I truly believe in the existence of life energy, this dual mindset made me both desire the objectivity of capturing energy readings on paper and also question its accuracy at the same time. Maintaining awareness, applying critical thinking skills, trusting my inner knowing, using multiple sources of data, and practicing reflexivity as a researcher helped facilitate this ambivalence. Researcher bias cannot be eliminated, but we ideally lessened the impact of this bias by being transparent of any possible influences.

Heather. My research is grounded in the critical paradigm, also known as the ideological paradigm. To me, objectivity is impossible and in some way or another subjectivity is always a factor when ontological and epistemological assumptions are made. I have unique values and beliefs and these affect what my reality is and how I perceive that reality. My values are embedded in this research project and in my discernment process. I am aware that my own subjective values, beliefs, and realities influence the way I viewed this project, how it was written and carried out, how I interpreted my intuitive processes and feelings during the 6-week study, and how my observations played a key role during the analysis process. Having three researchers with three unique paradigms and realities allowed for a well-rounded, integrative discernment process throughout the course of this research project.

Using a multiple-case study method with multiple forms of qualitative data corresponded with my critical paradigmatic approach by allowing the subjectivity of each case study, and each researcher, to be a central part of our research process. The axiology of this paradigm, which focuses on dialogue, consciousness, and conflict, fits well with using journaling and cross-case discussions on each form of data collected. The design of this research project allowed me to assess the intricate themes that are present and make discoveries. Through these discoveries and our discernment process, I hope to use this research as a way to raise personal and social consciousness in order to empower people and facilitate transformation. Although these hopes exist, I have been open-minded and flexible, and I have been able to critically think about all aspects of this study. I know that my subjective reality is not the only one woven throughout this research project.

Ann. My research is rooted in the post positivist paradigm and in a certain area has a subtle shift into the critical paradigm. The view of objectivity in the critical realist ontology of the post positive paradigm follows my beliefs that natural laws exist but as humans we work to our best ability to discern research as unbiased as possible. This viewpoint also connects with the modified objectivist epistemology and the critical multiplism methodology that state objectivity isn't absolute and multiple sources of data and qualitative research add strength to the research. The application of professionals in our data collection process along with our use of eleven qualitative data sources and cross-case analysis fits well with my post positive beliefs.

In the areas of values and beliefs, my view shifts to the axiology of the critical paradigm. This highlights the dialog and social consciousness in the research. The use of journaling and cross-case discussion of our journals encompasses this view in our process. These two paradigms were my reference point and added another distinct layer of diverse perspectives to our group's research process.

As researchers, our paradigms impacted the way we developed and implemented this study. Next, we describe our theoretical lenses that framed this project.

Theoretical Lenses

There is one theoretical framework and two conceptual frameworks that provide the necessary grounding for this research project. We focus on character armoring theory and the concepts of holism and vitalism. In this section we summarize each of these ideas and make specific connections to this particular research project.

Character armoring theory. Of the several theories that connect breath, emotion, and energy, Wilhelm Reich's character armoring theory connects these elements

most intricately, and is described in more detail within the literature review. Character armoring theory states that the expression of unpleasant emotion is blocked by habitual unconscious breathing patterns and muscular constriction, which blocks energy flow in the body. The physical manifestations of this effect are known as character armor (Reich, 1972). When a person is able to unblock the flow of energy through the expression and release of their inhibited emotions, their breathing is freer and more natural (Schwartzmann, 2012).

Character armoring theory played a role in our literary research process. We searched the current literature for studies that connected all elements of the theory (breath, emotion, and energy). The lack of studies connecting these elements helped us design our research question. The essence of charactering armoring also helped us design our question. Since this theory conceptualizes how *unconscious* breathing patterns affect emotion and energy flow, this makes us wonder, on the contrary, how *conscious* breathing affects emotion and energy flow. We chose instruments for our study that measure specific elements of character armoring theory, including photographs and body scan diagrams to capture the effect of conscious breathing on physical manifestations of emotion and energy flow (character armor), as well as aura readings to measure changes in energetic patterns over time. Since the true essence of the connection between breath, emotion, and energy flow cannot be captured on the surface, we chose qualitative data and a case study design that provides us with the ability to dig deeper. Lastly, we chose a form of data analysis that allows for themes to emerge, which resonates with the emerging and dynamic quality of emotion and energy that is highlighted in this theory.

Holism and vitalism. Holism and vitalism are separate concepts, but they fit well together when studying characteristics of holistic medicine (Micozzi, 2011). Holism is non-reductionist and appreciates the complex interconnections between all the parts of organisms and systems (Kabat-Zinn, 2009; Micozzi, 2011). Holistic medicine treats the whole person, values the uniqueness of each individual, and encourages self-healing with the use of inner resources to restore balance and health (Micozzi, 2011).

The concept of vitalism encompasses the idea that living organisms have an energy that is nonmaterial. This energy, along with the breath, is vital for existence. The breath is seen as a mysterious thing that is the key to life and connects living organisms to the world (Micozzi, 2011).

Holism and vitalism inform our research in many ways. One reason why we picked this topic to research is we believe that every person is a whole being made up of many interacting parts, and a living energy is one of those parts. We value the importance of breath and energy as vital to existence, and also as an important part of self-healing. Since energy flow is a non-material element that cannot be measured by traditional allopathic research tools, we attempt to measure this phenomenon in our research design by looking at emotional and physical manifestations of energy as well as changes in energetic patterns over time using photographs, aura readings, journaling, and an intuitive sense of energy flow through the body scan. We believe in the deep connection between breath, emotion, and energy flow based on the concepts of holism and vitalism; however we are unsure of the role of conscious breathing on emotion and energy flow and are attempting to capture this through our study. We chose to measure qualitative data because it is less reductionistic in nature than quantitative data and we use research

instruments that allow room for holistic characteristics that other designs do not leave room for. We chose a case study research method because it allows for the uniqueness of each individual. We honor the concept of holism with the realization that normalization, standardization, and generalization are limited with our research design, but we value the subjectivity, depth, and thick description our design permits. The quasi-experimental multiple case study design integrates characteristics of traditional (empirical) research methods, while still maintaining the integrity of the concept of holism and remaining true to the holistic nature of the topic. We also use a pluralistic paradigm approach, which resonates with the holistic philosophy, allowing for a more well-rounded and holistic inquiry to the research project.

Our theoretical lenses provided a framework for this study and included character armoring theory, holism, and vitalism. Next, we articulate our professional lenses.

Professional Lenses

Our research team brings individualized professional experiences that affect the whole research process. What follows is a description of each of our professional experiences, consideration of how they influenced our research, and how we maintained transparency.

Amy. I have worked with conscious breathing, emotion, and energy modalities on a professional level in several ways. In my previous role as an Exercise Specialist in Cardiovascular Rehabilitation (CR), I worked with people who were experiencing significant emotional stress related to a recent medical event, many of which had difficulty breathing due to chronic disease. To help with this problem I developed a wellness class curriculum for my CR participants. The curriculum included a breath

therapy class where the participants learned how to use deep diaphragmatic breathing techniques to reduce emotional stress by eliciting the relaxation response, as well as mindful movement techniques that have a focus on energy and breath awareness such as yoga, tai chi, and qi gong.

Most recently in my role as a Health and Wellness Coach working with a more general population, I am training to become a Mindfulness Based Stress Reduction (MBSR) instructor. Key components of MBSR include mindfulness meditation (including mindfulness of the breath, body, and emotions), mindful movement, and a non-judgmental attitudinal foundation. Through this training process I am receiving mentorship from a trained MBSR instructor. In this role I have become attentive of people's lack of awareness of their breathing patterns both in structured exercise as well as in everyday life activities. Energy and emotional attachment becomes evident through these mind/body practices.

These professional experiences have influenced my participation in this research project by witnessing first-hand accounts of the benefits of breathing practices, and perhaps most significantly by developing a passionate interest on this topic and a bias towards using these techniques. In both of these professional roles I have had the opportunity to be engaged in research assignments in which I have gained experience in important research concepts and processes. Furthermore, the nature of these professional roles enhanced my critical thinking and discernment skillset. I applied this skillset throughout this research project.

Heather. My years of experience as a Child Protective Services (CPS) caseworker have prepared me to be a critical thinker and overall researcher. I was

required to investigate every aspect of a family's life and remove any personal or professional biases I may have had in order to make informed decisions. My experience in CPS also brought my awareness to the levels of stress and emotional energy that are present in individuals and in households. Working with many professionals, programs, and facilities that were put into place in order to help with the management of stress and other potentially harmful emotions led me to realize that more holistic approaches were left out of the system. The addition of conscious breathing techniques, among other holistic approaches, could potentially make the system more effective in helping individuals and families heal. I noticed that having a child take a few deep breaths and engaging in a dialogue in order to make a connection with them before I started the interview would help them to center themselves and calm down enough to identify and talk about difficult emotions and experiences.

The work experiences I had and the discoveries I made connect to my paradigm, as discussed previously, due to my desire to use the discoveries I make during this process as a way to empower people and transform their health and their lives. Based on these experiences, I have formed some assumptions and biases regarding conscious breathing and other holistic practices. Although my passion about, and preference for, holistic health practices is embedded in this research project, I strived to remain transparent and open-minded through this process. My extensive training on child development, family dynamics, interviewing techniques, writing skills, critical thinking, and self-awareness of my personal biases have taught me to look at the bigger picture of any situation by taking into account the subjective reality of each individual while

remaining aware of my own reality and biases. This allows me to piece together all aspects of a situation, discern, form multiple hypotheses, and discern more.

Ann. My professional experience as a marketing and media professional brings with it a worldview different from the health care perspective and a lens for examining research along with unbiased discernment of facts. In the fast-paced world of the television and newspaper industry, I saw first-hand how consistent stress impacted the emotional states of many of my associates. This predicament helped guide my inquiry into ways to alleviate this constant tension by using breathwork and yoga. My media experience also allowed me to lead consumer market research that looked at qualitative and quantitative data in an objective way to understand the preferences, attitudes, and behavior of key consumers.

My interest in breathwork went a step further with my volunteer work as a grief mentor for children going through a family divorce or death of a parent. These children were feeling great sorrow and isolation from friends and family. It was difficult to get them to discuss their feelings but I found the use of breathwork, specifically conscious breathing techniques, as a relaxing remedy to help them open up and share their experiences. These discussions brought about a bond within the group's children and renewed life optimism.

My professional background has provided for an understanding of the research process and the use of breathwork that produced positive outcomes. Though I have come to this process with a biased view when it comes to the positive results of breathwork, my background of impartially looking at facts along with objectively reviewing research brought balanced interpretation of our research results.

Personal Lenses

Personal experiences, like our professional experiences, have given each of us in our research team lenses through which we viewed every step of this research process. These individual frameworks shaped our interest in the topic, how we engaged with it, and how we developed and interpreted the research. Therefore, we note each of our relevant personal experiences, consideration of how they may have impacted our research, and how we maintained transparency throughout this project.

Amy. As a graduate student in the Master of Arts in Holistic Health Studies program at St. Catherine University, as well as an avid believer in mind/body medicine, I am aware of a number of personal biases related to this topic. My holistic health mindset includes a belief that energy and emotions share an inherent relationship with the breath and that these aspects can play a role in both disease and health. My experience with the master's program curriculum has strengthened this belief. I became interested in the specific topic of this research project during a trip to India in which I first made a powerful intuitive connection between my unconscious breathing and muscular constriction patterns, emotions, and my chronic back pain. I practice conscious breathing techniques on a regular basis and have experienced first-hand the benefits of this practice. I have also experienced energy healing and have practiced breath and energy awareness techniques such as meditation, yoga, tai chi, and qi gong. As I bring more awareness to my emotions and my breathing patterns, I directly experience the deep connection of breath, body, and emotions, as well as the aspect of energy flow on a more intuitive level.

I am aware that my identity as a white, middle class, able bodied, well-educated, thirty one year old has shaped my lens in that I have had access to learn as well as

physical, mental, and financial ability to have had these experiences. Furthermore, although my upbringing encompassed Christian religious roots and Western medical system practices, my open mindedness, curiosity, and personal concerns have encouraged me to question traditional Western religious and medical norms. This has influenced my interest in Eastern concepts such as holism and vitalism. In considering ways of maintaining alertness of these favoritisms, I practiced reflexivity as a researcher and assessed these possible biases at each key point of decision making, and maintained this awareness and transparency throughout the entire process through personal reflection and team conversation. I also held an open mindset that honors the “beginners mind” concept of mindfulness and entails no expectations as to how the research study will play out.

Heather. As a graduate student of the Holistic Health Studies program at St. Catherine University I understand that I may harbor personal biases regarding conscious breathing, energetics, emotions, and holistic health in general. I have learned about various conscious breathing techniques, the role that energetics plays in and around the body, and the dynamic ways that emotions affect health and healing. I have engaged in numerous practices and exercises that highlight the knowledge I have gained. Some of these, such as yoga and meditation, have conscious breathing techniques at their core. This educational journey is not only shifting my perspectives on health and wellness, but it is also furthering my self-awareness and allowing me to become more transparent to myself and others. I reflect on this knowledge on a daily basis and these daily reflections have allowed me to become aware of my views, morals, beliefs, ethics, biases, and assumptions, which allowed me to remain transparent throughout this research process. My eyes have been opened to holistic concepts and theories that have fully engaged my

mind and emotions. The passion that has grown from these experiences has allowed me to be fully present and open to every step of this process.

In January of 2015 I went to India for two weeks to learn about the health and healing perspectives of the Indian cultures. I was immersed in other ways of knowing and this expanded my knowledge and informed my views regarding other ways of knowing, and my own way of knowing. I learned about, and practiced, various forms of pranayama, which stems from the practice of yoga. I also learned about the ways that those conscious breathing techniques affect a person's mind, body, emotions, energy flow, and spirit, and I experienced first-hand the affects those techniques had on me and those around me. These effects were seen in various forms, some of which included expressions of different emotions, increased spirituality and interconnection, slight changes in personalities and the way people hold and express themselves, and increased love and openness. My journey to India also allowed me to identify areas within my social and personal life where I have privilege as an educated Caucasian American heterosexual mother, while it also helped me to identify areas where I am marginalized as a working class Pagan female. I was not able to identify some of those social layers and the effects they have until I immersed myself in other ways of knowing. These experiences have broadened and deepened my knowledge about myself and the topic of this research project, by showing me how subjectivity shapes a person's reality and experiences. This has allowed me to grow as a researcher and to feel more grounded in my paradigm. They have also heightened my awareness, which allows me to be even more transparent to myself and others. Having an open mind and engaging fully in all

learning opportunities has made this growth possible and I continued to approach this research process with that mind-set.

My deep rooted passion for holistic health is present in all areas of my life. Energetics has always sparked my interest and has now become a central topic in my life. I have always been aware of the vital energy that encompasses all of life and how that energy impacts a person's emotional, physical, mental, and spiritual health. I recently became aware that the flow of energy in and around the body plays a major role in herbalism, which I quickly realized is my purpose in life. I have taken numerous herbalism classes, have read many books and articles about herbalism and energetics, and I am currently taking a ten month long certification program in herbalism. In that program I have experimented with the flow of energy in a person's body by feeling their pulse. I have noticed that numerous factors influence the flow of their energy, and if a person takes a deep breath I can feel a shift in the energy of their pulse.

I have also harnessed the powers of the breath for healing purposes. Years ago I suffered from anxiety and I chose to use deep breathing as a way to get through my anxiety and panic attacks. It helped immensely and allowed me to get through those rough times without using pharmaceuticals. As a mother, I have noticed the profound effects that conscious breathing can have on the emotions that my children experience and express.

Throughout this project, I have been able to practice all the new knowledge I have gained, and it has informed my role as a researcher. I have become more grounded in the topic of this research project, and I have grown personally and academically, which allowed me to be a well-rounded researcher. The more I learn about myself, the more I

am able to apply that to myself as a researcher and to the research project. I immersed myself in this process, without expectations, and will continue to allow further knowledge and experiences to emerge with an open mind and an open heart.

Ann. As a graduate student in Holistic Health Studies at the University of St. Catherine, the courses I have participated in have given me the benefit of learning about numerous mind, body, and spirit methods that assist in balancing our emotions to promote a healthier lifestyle.

My view of wanting to investigate a subject I am passionate about and the value of holism are rooted in my upbringing. I grew up in a mid-western, middle-class, suburban family where my parents were educators. Their belief in the significance of lifelong education, the benefit of physical activity, and the value of a strong religious faith were embedded early in my life and are still part of my value system. The principles I learned through my religious upbringing in a Scandinavian Lutheran church, though more traditional and sprinkled with many northern European members, was also very open-minded in the teaching of understanding and embracing other cultures and their customs and beliefs. This has helped me, throughout my life, accept and respect the beliefs of others that differ from the Western viewpoints I grew up understanding as the norm.

I have also incorporated the practice of breathwork, mindful meditation, and yoga into my daily life for the last 20 years. These practices brought about a desire to learn more regarding how the breath plays a role in bringing a healthy change to the body. I have also included energy healing and chiropractic care into my medical therapies. As a wife and mother, I have included holistic nutrition and breathing techniques in my

family's daily life. I have seen how these holistic practices have helped my family stay healthy in their active lives. The calming and harmonizing effects of all these exercises and therapies have been beneficial to me and my family's health, and therefore my lens in this research project leans toward the belief that these practices can generate favorable experiences. My education and background in holistic health practices have provided a base for my understanding of our research material but have also created a bias toward the positive effects they can provide. I worked to remain open-minded and to retain an impartial view when we investigated our research.

Method

The purpose of this chapter is to detail the method we used to carry out this research project. In order to describe the effect of conscious breathing on emotion and energy flow, we grounded our research in the unique interplay of our individual paradigms. We used a quasi-experimental design and conducted individual case studies on ourselves, over the course of 6 weeks. Multiple forms of qualitative data were collected and analyzed. Our data sources included professional aura and chakra readings, photographs, body scan diagrams, journals, and third party observation forms. We analyzed each case individually and then compared these multiple cases to develop a cross-case conclusion.

We start this chapter by discussing the paradigms in which our research was grounded. We then explain the method we used to conduct our study, including the rationale and strengths. Next, we describe our sampling methods. Following that is a discussion on our instrumentation and data collection. Proceeding is a description of how we maintained reliability, validity, and rigor. Then, we detail our procedure for data analysis. Next, is a discussion about ethical considerations, comprising of risks and benefits of participation, confidentiality of data, informed consent, and other considerations. Finally, we conclude with the limitations of our chosen design.

Researcher Paradigms

This research study was grounded in a pluralistic paradigm approach, which brought more depth and a balanced perspective to the research study. We provide a more in depth description of our individual researcher paradigms along with our experience, education, and theoretical frameworks in the lenses chapter. Heather approached this

study from a critical paradigm, which brought subjectivity to the research project. This paradigm views research as a way to raise personal and social consciousness in order to empower people and facilitate transformation. Amy and Ann approached this study from a predominantly post-positivist paradigm, which brought modified objectivity to the research project. Regarding research, this paradigm appreciates multiple sources of information, qualitative data, and the emphasis is placed on discovery and verification. This mixture of paradigms brought a well-rounded approach to our research study by providing multiple perspectives.

Design and Method

In order to answer the question, *how does conscious breathing affect emotion and energy flow*, we used a quasi-experimental research design and conducted individual case studies on ourselves over the course of 6 weeks. Case studies are commonly used as a research method in social science and behavioral disciplines. Case studies can be used in a research project with a descriptive purpose in order to document the phenomenon of interest (Marshall & Rossman, 1990; Vanderstoep & Johnston, 2009). According to Yin (2009), “A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 18). They work well when a “how” or “why” question is posed, especially when the question requires an extensive and in-depth look at an individual-related phenomenon (Yin, 2009).

It is common for case studies to end with assertions, which means that a conclusion is drawn regarding the overall meaning (Creswell, 2013). Generalization of these assertions is greater when using multiple-case studies that are replicable (Creswell,

2013; Yin, 2009). In order to increase generalization, we used a quasi-experimental design so that the procedure could be replicated for each case study. This design is comparative in nature, and aims to determine variances across groups, which fits well with our multiple-case study method (Rallis & Rossman, 2012). Quasi-experimental designs commonly use pre and post data to assess the effect of an intervention (Rallis & Rossman, 2012). We used pre and post photographs, body scan diagrams, and aura and chakra readings, as well as other qualitative data collected throughout the 6-week study to assess the effect of the conscious breathing intervention on emotion and energy flow.

Due to the complex topic of this research study, conducting case studies allowed us to include holistic characteristics and interactions that other methods such as surveys and interviews do not leave room for. Using case studies also allowed us to include direct observation as a source of evidence (Yin, 2009). We completed internal and external observations of ourselves throughout the 6-week time frame. We translated these observations through multiple sources of data, which we describe in depth in the instrumentation and data collection section.

An essential characteristic of case studies is that the researchers use multiple sources of evidence and then triangulate the data from these sources (Yin, 2009). We understand that energy flow is a complex variable to measure. We attempted to measure this phenomenon by looking at emotional and physical manifestations of energy as well as changes in energetic patterns over time. For this research project, we collected various forms of qualitative data through aura and chakra readings, facilitated breath sessions, home breath practices, photographs, guided audio body scans, body scan diagrams, journals, and third-party observations. These forms of qualitative data allowed us to focus

on the whole picture and bring subjectivity, details, depth, complexity, interaction, and discovery (Graham & Geisler, personal communication, September 6, 2014). According to Roberts & Priest (2010), qualitative research is “a means of exploring an area of human experience” (p. 151). Given the topic, purpose, and question of this research project, and the paradigms that we approached this project from, qualitative data fits well. This “methodological congruence” (Creswell, 2013, p. 50) provided a cohesive and logical framework that strengthens the study as a whole.

Our design and method encompassed a quasi-experimental research design and three individual case studies on ourselves. We collected a variety of qualitative data, providing subjectivity in a comprehensive perspective. We will now outline our sampling procedures.

Sampling

We used a combination of purposive and convenience sampling methods to enroll participants in our study. A purposive sampling method, often used in qualitative research and for selection of case studies, allows the researcher to obtain information from participants who are most likely able to answer the research question and are willing and able to contribute their insight on the topic of interest (Creswell, 2013; Roberts & Priest, 2010). Convenience sampling is used to enroll participants who are easily accessible, and saves time and effort in the enrollment process (Creswell, 2013). For this research project, we chose to use ourselves as the research subjects for reasons in which we discuss below.

A purposive sample made sense in this case due to the complex nature of the topic. As the investigators of this research project, we spent a considerable amount of

time researching and familiarizing ourselves with this topic. In order to obtain the depth of information we were seeking, an extensive amount of self-observation and reflection was required to help answer the question. The most meaningful information was obtained from individuals, such as ourselves, already familiar with the topic. Other considerations for purposive sampling include the financial cost as well as the extensive time commitment required for participation. We were fully committed to this research project and were willing to invest this money and time.

Convenience also played a role in our sampling decision. Due to time constraints of the study, choosing participants other than ourselves would have required a significantly higher amount of time and effort spent on the recruitment process as well as collecting additional data through doing interviews. We, as the researchers, were easily accessible, and this allowed us more time to spend on obtaining depth through a longer data collection and analysis process.

Furthermore, a sample size of 3 participants allowed a small enough selection to obtain the depth of information we were seeking, yet a large enough selection to allow opportunity to conduct a cross-case theme analysis (Creswell, 2013). Although the generalizability is limited due to lack of representation of the general population, this multiple-case study approach did allow for a higher sense of generalizability and replicability than choosing a single-case study. Using ourselves as the research subjects also increased validity by eliminating the error of transference between researcher and subject as the interpretation came directly from us. Lastly, the element of privacy and confidentiality was considered when selecting ourselves as the research subjects. This

allowed us control over how the data was stored and used, and let us keep the raw data from our hand written journal a private source of data.

The inclusion criteria consisted of being an investigator on this research study. We enrolled ourselves into the study by reviewing and signing the consent form. As the subjects, we each applied and received funding provided for St. Catherine University graduate students by the Graduate Student Advisory Board to use towards financial costs of professional aura and chakra readings and facilitated breath sessions.

The decision to use ourselves as the research subjects in our study was a mixture of purposive and convenience sampling, which allowed for more in depth information and a longer data collection process. A detailed outline of instrumentation and data collection will be reviewed next.

Instrumentation and Data Collection

While Yin (2009) recommends using six types of instrumentation for data collection in a case study, we used eleven. Our instrumentation included ourselves as researchers, professional aura and chakra readings, facilitated breath sessions, home breath practice, photographs, body scans, body scan diagrams, journals, and third party observation forms. See Figure 1 for a detailed snapshot of the data collection matrix.

Figure 1: Data Collection Matrix

Instrumentation	Pre	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Post
Professional Aura and Chakra Reading	x							x
Facilitated Breath Session		x (Group)		x (Individual) (optional)		x (Group)		
Home Breath Practice (Daily)		x	x	x	x	x	x	
Photographs (once weekly)	x	x	x	x	x	x	x	*
Body Scan (once weekly)	x	x	x	x	x	x	x	*
Body Scan Diagram (once weekly)	x	x	x	x	x	x	x	*
Journal (Daily)		x	x	x	x	x	x	
Third-Party Observation From								x

*The Study ended on a Sunday, therefore the week 6 data for the body scan, body scan diagram, and photographs were considered post study data.

Researchers. The researcher is the key instrument in qualitative research (Creswell, 2013). This was especially true in this study where we performed individual case studies on ourselves. With three researchers, this provided three different perspectives through the course of the project. We practiced reflexivity as researchers by remaining engaged throughout the entire process. This is described in more detail within the reliability, validity, and rigor section.

Professional aura and chakra readings. Each participant received two professional aura and chakra readings, one at the beginning and one at the end of the 6-week study, in order to capture visual evidence and description of personal energetic patterns. These sessions were performed by Annette Bruchu, a professional trained in aura photography and chakra imaging. We received an 18-page report of the internal and external energy patterns, including the seven chakras, which are expressed through pictures, colors, graphs, and descriptions. The sessions included Annette's interpretation of the reading, which we captured through our personal notes. See Figure 2 and Figure 3 for a detailed description of the colors and chakras respectively.

Figure 2: Description of Colors

White-	The color of supernova energy (pure, unstable, low energy).
Violet-	The color of visionary and gentleness.
Blue-	The color of spiritual life energy, connection, and calmness.
Green-	The color of harmony with the logical, analytical side, and the heart of the healer. The color of growth and healing.
Orange-	The color of skill and artists, the ability to create a sense of reality and connection to creative ideas.
Red-	The color of passion and the courage to do things beyond and better. The color of protection. When mixed with a brown tone it is dealing with stress fullness.
Yellow-	The color of nurturing, laughter, joy, and happiness.

Figure 2. Descriptions adapted from Annette Bruchu (personal communication, April 12, 2015).

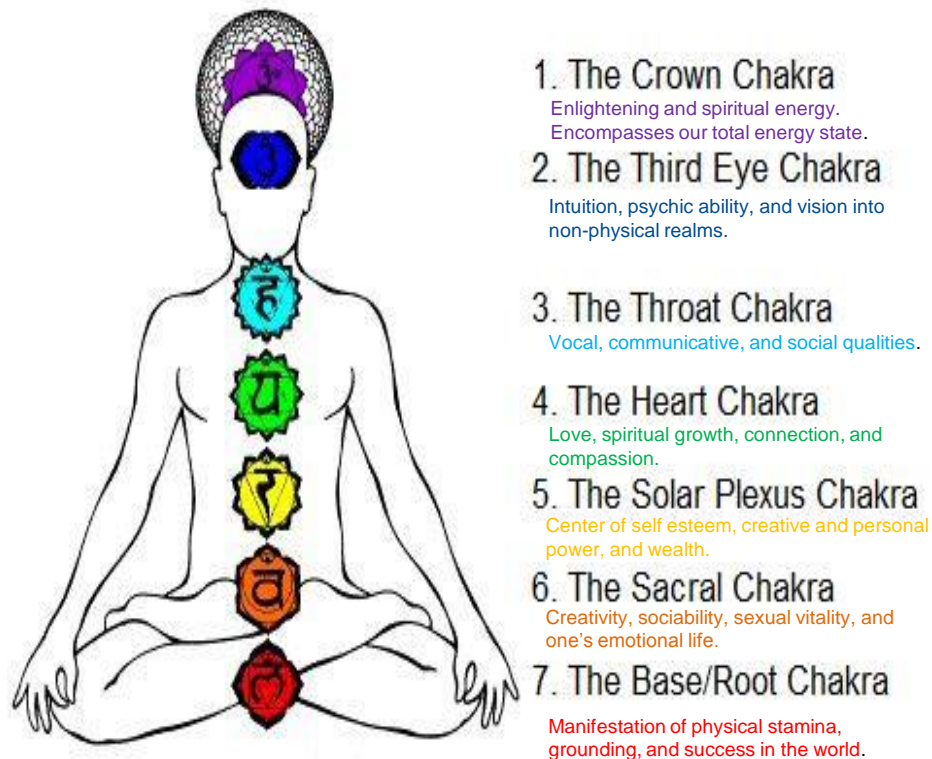
Figure 3: Description of Chakras

Figure 3. Retrieved and adapted from public domain (labeled for reuse):
<http://simple.wikipedia.org/wiki/Chakra>

Facilitated breath sessions. In weeks 1 and 5, each subject participated in a professionally facilitated 2-3 hour group breath session. In week 3, the subjects had the option to participate in an individual 2 hour facilitated breath session. Amy and Ann both completed the individual session. Due to unforeseen circumstances Amy completed this session in week 4. Heather opted not to complete this session. The sessions were facilitated by Terri Peterson, SBF, TBF, ACPH, RPh. Terri holds certifications in Transformational Breath® and Soul Breathing™, is an energy medicine practitioner and associate certified practitioner in Pranic Healing, and is a Registered Pharmacist. The conscious breathing technique we used in our study was Soul Breathing™. This technique uses diaphragmatic breathing with a full deep inhale connected to a relaxed exhale, incorporating a full body breath. Soul Breathing™ alters energy patterns and shifts mental and emotional states (Peterson, personal communication, April 8, 2015).

Home breath practice. These 5-10 minute daily practices were assigned by Terri Peterson, the conscious breathing facilitator, and continued for the 6 weeks of the study. The home breath practice was a shortened version of the Soul Breathing™ technique we performed in the facilitated sessions. The use of the professional facilitator kept the breath practice consistent between the 3 participants.

Photographs. Each participant was instructed to have a front view and side view photograph taken, with feet shoulder width and hands resting at their sides, pre and post study and on each Sunday of the study, in order to capture visual evidence of the physical features of each participant throughout the study. Photographs add strength to the data collection by obtaining data on nonverbal behavior and unconscious thoughts (Marshall & Rossman, 1990). Amy and Heather completed the photographs as planned; however

the only photographs that saved to Heather's phone were pre, week 3, and post. Ann completed the front view photographs, but did not complete the side views due to overlooking this detail.

Body scan. After taking the photographs, each participant completed a half hour professional guided audio body scan, pre and post study and on each Sunday of the study, which guided the participant in self-observation of physical and emotional elements, including an intuitive sense of energy flow. Each participant used the Mindfulness Meditations CD by Roberto Benzo, M.D., Disc 1, Track 2.

Body scan diagram. Following the body scan, each participant filled in the body scan diagram, pre and post study and on each Sunday of the study (see Appendix A). Participants used the same body scan diagram, which follows the verbiage of the guided audio body scan. Participants used the colors yellow, green, blue, red, and black to signify high energy flow to low energy flow, respectively, to fill out the diagram. Participants were also encouraged to rate any pain on a scale of 0 (no pain) to 10 (high pain), and to write descriptive words on the diagram that reflected their body scan experience. This instrument was designed by the researchers to provide a 6-week analysis of how energy and muscle tightness show up in their daily lives. The photographs, body scan, and body scan diagram were completed respectively. The photographs were performed first to eliminate any influence from the body scan, and the body scan diagram was completed last because it is a tool to capture and reflect the body scan experience.

Journal. Each participant kept a daily hand written journal for the 6 weeks of the study in order to collect self-observational content on thoughts and perceptions related to breath, energy, and emotion. There were no specific guidelines for the daily journal

entries. Each participant wrote as little or as much as they liked, completing the entry to their individual preference.

Third-party observation form. Each participant informed a family member or close friend that they were participating in this study, and asked them to informally observe them throughout the study, and at the end of the study, to fill out a third-party observation form (see Appendix B). This is an external view of how the researcher was perceived by those close to them from the beginning to end of the study.

Observation and documents are key collection approaches in qualitative research. The use of protocol by designing forms is critical as is field notes and intrinsic observation using all five senses during the whole process (Creswell, 2013). These areas were all incorporated with journal entries, the body scan, and third-party observation. The documents included the journal, photographs, aura and chakra readings, and the body scan diagrams.

We used a significant amount and wide variety of instrumentation to carry out our research project. Data was collected for 6 weeks and procedures were replicated for each case study. The following section articulates the reliability, validity, and rigor of our research project.

Reliability, Validity, and Rigor

Reliability and validity is of great importance in judging the quality and rigor of research (Roberts & Priest, 2010). In research using qualitative data, reliability and validity are improved through establishing credibility as a researcher, practicing investigator responsiveness, maintaining an active analytical stance, and clear articulation of data collection and analytical processes. In order to establish transparency and

credibility as researchers, we included a lenses chapter which articulates our personal, professional, and theoretical lenses. Each researcher was conscious and wrote of their biases, values, and experiences using reflexivity as a researcher (Creswell, 2013). This research was created through an extensive literature review on conscious breathing, emotion, and energy. We created an open environment and used an iterative process that allowed us to continuously deliberate and discern during the development and implementation of the research project. We also repeatedly discussed the findings during the analysis and interpretation process. We clearly detail our data collection and analytical procedure to increase replicability.

Ethics are a vital part of rigorous research (Rallis & Rossman, 2012). During the research process we considered this ethical obligation. As co-researchers we carefully considered the risk-to-benefit ratio and chose a research design that held potential for benefits that far outweighed the risk to the participants. During the data collection phase and throughout the research study we embodied an iterative process that involved reflexivity as both researchers and subjects. This included not only being consistently aware of the technical trustworthiness of the research design, but also being focused on the relational matters between us as co-researchers as well as our experience as subjects. As researchers, we created and followed group norms in our work and maintained open and respectful communication throughout the project. As subjects, we carried over this group support and strived to remain open to the data collection process without predetermined expectations.

Thoroughness is another vital part of rigorous research (Rallis & Rossman, 2012). The act of employing other researchers to review the procedures was done multiple times

in an effort to increase validity and reliability (Yin, 2009). The use of a quasi-experimental design and the inclusion of both a within-case and cross-case study analysis increase the generalizability of the study. According to Creswell (2013), it is important to analyze data from multiple perspectives and levels of abstraction. We took this active analytical stance throughout the entire process. When interpreting the results, we considered multiple explanations. Each participant had different life experiences and lifestyles during the data collection phase. For example, Heather traveled to India, where she experienced various breathing and meditation techniques. Lack of control for these variables may have contributed to differences between the cases. We showed investigator responsiveness by adjusting to Heather being out of the country and planning for this in our design by making the individual facilitated breath session optional. Investigator responsiveness was also shown by being open and responsive to the data by letting it emerge through the analysis, as well as utilizing critical thinking skills throughout the process.

A significant piece of research is assessing accuracy through validity and detecting reliability of the instruments and data being used. The use of professionals in the aura and chakra readings and facilitated breath sessions created validity with credible and trustworthy information (Roberts & Priest, 2010). The journal writing provided reliability strategies including rich description, intensive engagement with the data, and frequent moving between data and interpretation. The use of a variety of different instruments for data collection provided validity of the research through data triangulation (Roberts & Priest, 2010). As we examined conscious breathing and its effect

on emotion and energy flow, an area where the research is limited, we chose quality instruments to create the best data possible.

We used a variety of strategies to increase reliability and validity and to demonstrate rigor throughout our project, which strengthens our study. Subsequently, we describe our data analysis process.

Data Analysis

In order to analyze the data we collected, we used within-case theme analysis and cross-case theme analysis. Within this analysis, researchers create meaning of the content and text through the building of themes. According to Creswell (2013), within-case theme analysis is done first to provide a detailed description of the themes within each case. This is then followed by cross-case theme analysis, which allows for themes to emerge across multiple cases. Lastly, assertions or interpretations are made that provide the overall meaning of the case, which continues and deepens the lessons learned from the study (Creswell, 2013).

Although the details of the data analysis process differ from different authors, the main process involves a system of preparing and organizing the data, reading and memoing, classifying and coding, and representing and visualizing the data (Creswell, 2013; Roberts & Priest, 2010). We organized our data into our own individual case files containing our personal hand written journal, notes, aura and chakra readings, photographs, body scan diagrams, and third-party observation forms. In order to prepare the data for printing, the journal, notes, and third-party observation forms were typed out and the remaining data was scanned into the computer. To obtain access to the data from all three case studies, we created a secure online shared folder, in which we uploaded all

of the data, with the exception of the journals. We then printed and individually immersed ourselves in the data from each case by reviewing and reading through it several times. We wrote notes in the margins and under photographs that consisted of short phrases, key concepts, or ideas that occurred to us. We each developed a list of tentative themes (10-20) from our own individual journal. We also created a condensed version of our journal and displayed this data in a table format to give our co-researchers a more detailed glimpse without sharing the entirety of the raw data. We also performed word counts in our journal on words that appeared multiple times. We then collaborated with our co-researchers to perform the more detailed within-case and cross-case theme analysis.

We used an approach recommended by Creswell (2013) of inductive analysis, allowing the themes to emerge during the process. To perform the within-case theme analysis, we visually displayed all of the data in front of us for each individual case. We shared insights from our individual reading and memoing process as well as our condensed version and list of themes from our journal. Keeping our specific research question in mind, we then collectively wrote down notes as we looked for patterns and described our general observations within all forms of data. Next, we cut these notes and themes apart and combined everything into one pile. We went through each strip of paper one by one and began to form more themes as we continued to look for patterns across all forms of data. During this process, we kept side notes of interesting findings that didn't directly answer the research question. Finally, we further classified the data by merging connected themes into more general categories (3-6). We developed what Creswell (2013) refers to as, "generalizations that people can learn from the case either for

themselves or to apply to a population of cases” (p. 200). After performing this process for each individual case study, we color coded the cases and repeated the entire process a fourth time for the cross-case analysis, which incorporated the entirety of the data from all three cases. Assertions and interpretations followed, which involved abstracting out beyond the themes to a larger meaning (Creswell, 2013). We present an in-depth picture of the cases in our report in the results chapter through a combination of figures and description.

Our systematic approach to the within-case and cross-case thematic analysis provided structure that can easily be replicated. Attention to ethical aspects of research is discussed next.

Ethical Considerations

We used human research subjects and were aware of the ethical considerations involved. As researchers, we practiced reflexivity (Creswell, 2013) as we remained engaged and aware throughout the entire research process. We practiced non-maleficence and beneficence (Vanderstoep & Johnston, 2009) as we aimed to do no harm, but rather do good in our approach to the study and contribution to the literature. Considerations we addressed include risks and benefits of participation, confidentiality of data, informed consent, and other various items.

Risks of participation. Due to the nature of the study, participation may have caused psychological or physiological disturbances such as physical pain or various emotions that could have been brought up to the surface as a result of conscious breathing. We attended to this risk in multiple ways. We signed a consent form (see Appendix C) prior to the start of the study and had the option to withdraw from the study

at any point until data collection was completed on January 25, 2015, without consequence. We were also given the choice to decline completion of any specific component of the data collection. Terri Peterson, a professionally trained conscious breathing facilitator, provided the main facilitated breath sessions and prescribed the home breath practice. We could ask the facilitator for resources if necessary and were able to debrief about how we were doing at multiple check points with the facilitator, research class instructors, and with each other. As subjects, we were also engaged in ongoing self-care activities throughout the research project such as maintaining social support, eating healthy, and exercising.

Benefits of participation. There were no anticipated direct benefits to research participants in this study. Potential benefits may be personal and/or scholarly. As participants, we could have experienced positive psychological or physiological effects from the conscious breathing practice and/or act of introspective observation. We also could have received positive benefits from the relational experience with the facilitator and/or with each other. This research has the potential to make a beneficial contribution to the academic literature as well as to the profession of holistic health practices. The potential for psychological, physiological, and other personal benefits as well as growth in knowledge, contribution to academic literature, and advance in the holistic health profession as a whole outweighed the risk of possible psycho-physiological risks, especially considering our proactive stance on attending to these risks. Many benefits were experienced, which are discussed in the results and discussion chapters.

Confidentiality of data. In order to protect privacy and confidentiality, the raw data from our personal journal was not shared with other investigators. Each investigator

performed the reading and memoing of their own journal and shared a condensed version as well as a list of tentative themes with the other investigators in order to perform the within-case and cross-case theme analysis. Since we used ourselves as the research subjects, we had control over how the data was used and reported. We had the opportunity to use an alias in the report if we preferred, but we each chose not to.

The data was kept in our own individual hands during the data collection process. We were responsible for the protection of our own data. We stored the data in a format and location that we were comfortable with. To perform the analysis, we used a secure online folder that was shared between all investigators. The data was kept through May 31, 2015. After this date we used our individual discretion whether or not to destroy our personal data. The data is also in SOPHIA, an online repository provided by the Libraries of St. Catherine University. Data may also be made available in future publishing and presenting opportunities. We are agreeable to this. A hard copy is accessible at the St. Catherine University – Minneapolis campus library.

Informed consent. Since we used ourselves as the research subjects, we were each engaged in detailed creation of the consent document and had an inherent understanding of all methods, procedures, and details of the research project. Once Institutional Review Board (IRB) approval was issued, we each had the opportunity to sign the consent document to become a subject. We re-read the consent document thoroughly prior to signing it. Data collection began after the document was signed.

Other considerations. Other ethical items we considered during the research process include IRB approval, collaborating with co-researchers, authorship order, and reporting the study. All necessary materials were submitted to the IRB prior to beginning

the study, and data collection did not begin until after approval from IRB was obtained. This research project was approved by the IRB at the exempt level. As co-researchers we practiced non-judgment and respect for each other, and allowed all voices to be represented throughout the entire research process. Authorship order was agreed upon prior to submitting materials to IRB. In reporting the data, we used language that is transparent and appropriate for our audience. We reported honestly, without plagiarizing or falsifying information.

An assortment of matters was carefully considered in order to maintain ethical integrity of human subjects during this study. Our proactive stance assured that the benefits of participation outweighed the potential risks. Our design limitations are outlined in the following section.

Design Limitations

Our research design does contain some limitations. Although a qualitative approach provided detailed in-depth context to the case studies, it lacks breadth, which limits the generalizability of the results to a broader population. Qualitative research also takes a tremendous amount of time, and with the time constraints of the study we were not able to do as lengthy as a study and as in depth of analysis as we would have preferred. By not sharing the raw data from the journal, this means the journal was only analyzed from one investigator's perspective. Although we addressed this by sharing a condensed version and tentative list of themes from our own journal, this limits the results that may otherwise have been obtained through a more thorough analysis of this raw data from all three of the investigators' perspectives. On the other hand, the decision not to share the raw data from the journal resulted in more genuine writing from the

subjects. We also did not have consistency between cases for the photographs as some of them were missing. Other limitations of qualitative research include lack of ability to predict and control, subjective measurement, and lack of objectivity. However, we argue that this is not the goal of qualitative research. Furthermore, personal subjective style makes it more challenging to demonstrate reliability and validity of the study according to traditional quantitative standards, and no real consensus can be obtained on methods of data collection and analysis (Roberts & Priest, 2010).

Using convenience and purposive sampling means that participants were not representative of the general population as they were selected due to specific knowledge, experience, and ease of accessibility, which also limits generalization (Roberts & Priest, 2010; Vanderstoep & Johnston, 2009). Although we did use a multiple-case study approach with cross-case analysis, it can be argued that using a small sample size may be another limitation of the study. On the contrary, Creswell (2013) states that including more than one case in the study dilutes the depth of the overall analysis. Lastly, using ourselves as the research subjects could be considered a limitation due to researcher bias. We strived to maintain transparency in our study through the practice of researcher reflexivity and the inclusion of a lenses chapter. However, researcher bias may have still played a role.

Results

The purpose of this chapter is to describe in detail how conscious breathing affected emotion and energy flow throughout this qualitative study. The results of this study begin with a description of the participants. We then detail the themes that emerged from each individual case study. Finally, we describe the emerging themes from the cross-case study.

Description of the Participants

The researchers used themselves as participants in this study. There were 3 participants total, all Caucasian females. Two participants were 31 years old and the other participant was 47 years old. Each participant was a student in the Master of Arts in Holistic Health Studies program at St. Catherine University. The lenses chapter provides more background information on each participant.

Case Study #1: Amy

In this section, we describe the results of Amy's within-case analysis. Three themes emerged. These themes include interconnectedness, ambivalence, and loosening and surfacing.

Interconnectedness. The theme of interconnectedness was evident in many forms of Amy's data collection, but was most prevailing in her journal entries. She wrote multiple times about heightened awareness and connection both internally and externally as well as experiences of being in a *state of flow*. This is evident in the following section of her journal:

Today's breath practice experience. Grounded. Vibrating at higher frequency. Calm. Union between mind, body, and spirit. Deeper awareness. Attunement with body... Contentment to be where I am. Non-reacting. Non-judging. Oxygenated. Full of life. After my practice this morning I felt I was in a heightened sense of

awareness. Things felt like they slowed down and I was very mindful and felt an enhanced sense of compassion and love. Love for life and for John. This stayed as I lived my normal life for 10-15 minutes I'm guessing, then went subtly back to normal. It was a nice feeling. I felt complete.

The theme of interconnectedness was also apparent in her body scan diagrams and in her post aura and chakra reading. Her pre body scan diagram depicted her energy flow as very fragmented and broken with many sections of different color. Her post diagram represented a more cohesive picture with further connection and union of color (see Figure 4).

Figure 4: Amy's Body Scan Diagram

[illegible]

Name: Amy Heath Body Scan Diagram Date: 1/25/15

Forehead Eyebrows
Eyes Ears
Nose Jaw
Mouth Throat
Shoulders Chest
Upper torso Belly
Forearms Wrists
Palms Fingers
Hands Wrist
Upper Legs Pelvis
Shin Knees
Ankle
Toes

Top of feet

Back of head
Neck
Shoulders
Back
Upper arms
Elbows
Lower back
Hands
Fingers
Upper Legs
Glutes
Calf
Bottom of feet

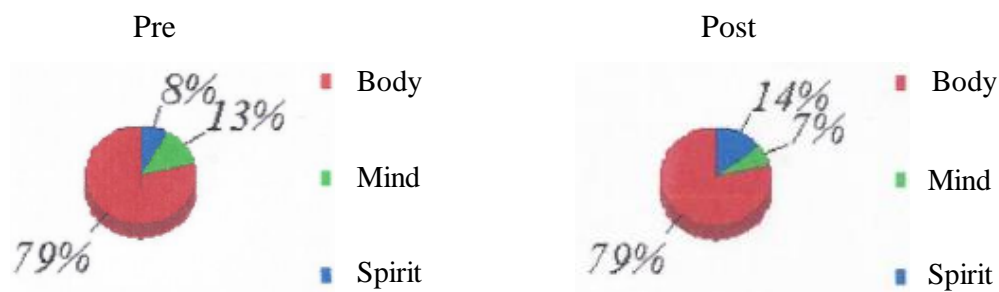
How to left
subtle vibration
through body

more
disposal
more
share
wanted
on

subtle tingle

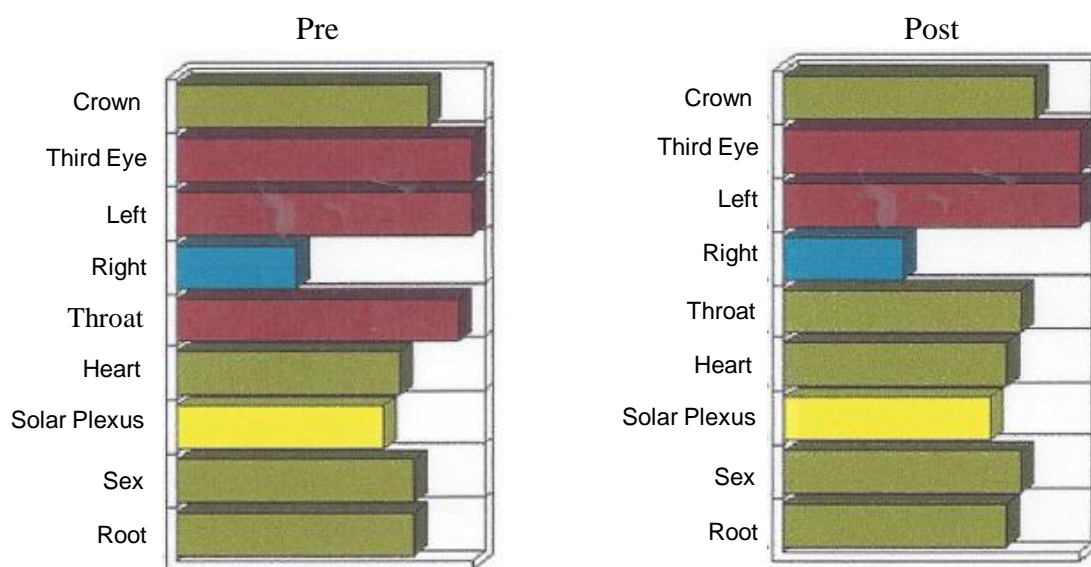
Her aura and chakra reading showed a shift in spiritual energy from 8% on the pre reading to 14% on the post reading (see Figure 5).

Figure 5: Amy's Mind, Body, and Spirit Graph



She also let down a layer of protection in her throat chakra as evident from a shift in color from red to orange (see Figure 6, graphic color appears greenish gold, but full report states orange). These changes suggest increased trust in intuitive connection. Overall interconnectedness was experienced on a physical, mental, and energetic level.

Figure 6: Amy's Chakra Chart



Ambivalence. The theme of ambivalence was evident throughout Amy's journal through words that portrayed uncertainty, lack of clarity, inconsistency, and fluctuation. Ambivalence was shown when writing about elements of control, perfection, letting go,

expectations, and acceptance. For example, sometimes she wrote about being *able* to let go and other times she wrote about the *need* to let go. Amy did note that the effects of the breath practice tended to decrease the need for perfection and control (in that moment). This was only an immediate effect of the breath practice and was perceived as short lived. There were clearly recurring immediate responses to the breath practice; however Amy noted a lack of clarity of her experience as it was difficult to discern if there was a connection to the rest of the day's experience or anything that affected her over time. When Amy wrote about topics such as back pain and having a distracted versus aware mind, there was a lot of fluctuation throughout the study. This was also reflected in the body scan diagrams with fluctuation in pain ratings from week to week. Uncertainty was portrayed in various sections of her journal through words such as *who knows, I don't know, I don't really understand*, and *not sure why* as well as through the use of many question marks. Amy uses the word *subtle* 22 times in her journal entries, which also alludes to uncertainty and lack of clarity.

When Amy writes about emotion throughout her journal she is inconsistent. In her last journal entry she reflects on her overall experience of emotion through the study:

An overall neutral stability of emotions (with exception of facilitated sessions). No strong emotions to report otherwise. Just small nuances of different emotions throughout the events of the day.

However, her within-case analysis reveals various different emotions written about throughout her journal with indication of different intensity. A word count does show that she most commonly uses the word *calm*, however she also writes several times about feelings of *stress* and being *overwhelmed* and *exhausted*. Furthermore, the only change

that her third-party observer noted was that she *seems a little more frustrated*. Amy's last journal entry as she reflects on her experience captures the theme of ambivalence well:

I have a subtle sensation of relief. I don't know if this is because I have completed data collection, or that I am getting signs that this is working, or something coming to the surface from a deeper level. It seems so many more words should go on paper for data collection throughout this experience, but there might be so many things happening that I am not completely conscious of, or that may be relevant, but I don't identify it as so. So many nuances throughout the day in our body, mind, and spirit. How can I possibly capture it all? How do I know what is relevant to this research project? I just have to trust in the process. I feel like I can only consciously identify and capture only a sliver of my life on this paper. The words in this journal will have to suffice. I need to let go of the idea of perfection. The thought of all that might be missing for data collection purposes makes me uncomfortable, but I need to trust that this is enough. I am enough. As I reflect back to the last 6 weeks it is hard to pinpoint any specific changes over time. There are many subtleties of thought that aren't concrete enough to really grasp onto and write on paper.

The photographs, third party observation form, and aura and chakra readings showed subtle changes, which creates ambiguity and further supports the theme of ambivalence.

Loosening and surfacing. Signs of loosening and surfacing showed up through Amy's journal, body scan diagrams, and photographs. She wrote about having awareness of restrictions in her breathing pattern and how the breath practice helped her feel *more oxygenated* and have a *fuller, more expanded breath*. She noted that the breathing technique *became easier over time* and *more natural*. She also reported *tingling* and *vibration* with the home breath practice and at a higher intensity with the facilitated sessions. She used words such as *less solid*, *frequency*, *pixels*, and *molecules* to describe sensations of a *change in physical form* on an *energetic level*. The words *vibration through body* were noted on the post body scan diagram, with no mark of this on the pre diagram. Amy experienced forceful clenching in her wrists and fingers during the facilitated breath sessions, citing less intensity during the last facilitated session. The

body scan diagrams showed cold feet and cold hands from pre through week 4 of the study compared to weeks 5 and post that showed cold feet and warm hands (see Figure 4).

The body scan diagrams showed evidence of an intuitive sense of improved energy flow throughout the study, with the best flow being depicted in weeks 3 and post. Although Amy's upper back pain fluctuated throughout the study she noted increased sensations in her back including a *feeling of movement* through *twitching*, *pulsing*, *achiness*, and an *urge to crack* her back. She described a *stagnant, shelf-like* feeling of *tar* in her back and experienced a sense of general loosening over time. This was evident on her body scan diagrams with the black color becoming lighter and smaller each week as well as a reduction of pain (see Figure 4). Amy's pre diagram also showed a red color in her left leg and hip that was not evident afterwards. She noted awareness during the body scans that she *leans to the left*, which was also apparent in her photographs with her left shoulder being lower than her right in all except for week 1 and 5. The post photograph also shows a facial expression that depicts less tension compared to the pre photograph (see Figure 7).

Figure 7: Amy's Photographs



Amy also experienced surfacing of emotion during the facilitated breath sessions. She wrote about *waves of sadness* and a profound realization that she was *holding some hurt* in the area of her chest and heart. This was sometimes released through tears. Amy wrote in her journal about the surfacing of sounds such as a *vibrating singing bowl* and a *flowing faucet* immediately after the home breath practice. Her journal also revealed an increased frequency of writing about dreams towards the last half of the study. These dreams were often about the past. One dream portrays the body surfacing and purging something foreign:

I dreamt last night that I had a worm burrowed into my toe. I pulled and finally got it out. Then I found a second one and pulled that out as well. I was barefoot at a gymnastics meet and all of a sudden there were worms on the floor everywhere and the person next to me pulled a worm out of her foot too. I was disgusted by this. When I woke up the thought of this gave me the creeps. At least I got rid of the worm! But was there another one in there? It was as if I had gotten rid of something foreign in my body, something gross that didn't belong. Ironically I had a dream last week that my tooth had rotted and fallen out. Underneath my tooth was a large piece of rotting onion. In real life I went to the dentist a couple days later and found out my gums were mildly infected. Maybe the worm represents something my body is trying to get rid of?

Amy's three themes of interconnectedness, ambivalence, and loosening and surfacing were the strongest themes that emerged in her within-case analysis. Next, we will discuss Heather's within-case analysis.

Case Study #2: Heather

In this section we describe the results of Heather's within-case analysis. Six themes emerged. These themes include cleansing, emotionally grounded, movement, openness, confidence, and spiritual growth.

Cleansing. The theme of cleansing was evident across all forms of data. In the pre and post photographs, the psoriasis on Heather's hands and arms are clearer and not as irritated (see Figure 8).

Figure 8: Heather's Photographs



Heather wrote about cleansing in a variety of ways in her journal, specifically during and after each facilitated breath session. During the facilitated sessions Heather felt *tingling*, *vibrations*, and *energy* in her body. The feelings were most intense in her hands, jaw, and chest. Heather explains this movement and surfacing of energy in her first journal entry: *I think that all the energy blocks, or at least some of them, worked their way into my jaw and hands. My lungs burned a little because I am not used to using them fully.* Heather became sick with sinus congestion and coughing spells the day after each facilitated session, and this lasted for a week each time. She reflected on her first session, and the evening and morning following that session, in her journal:

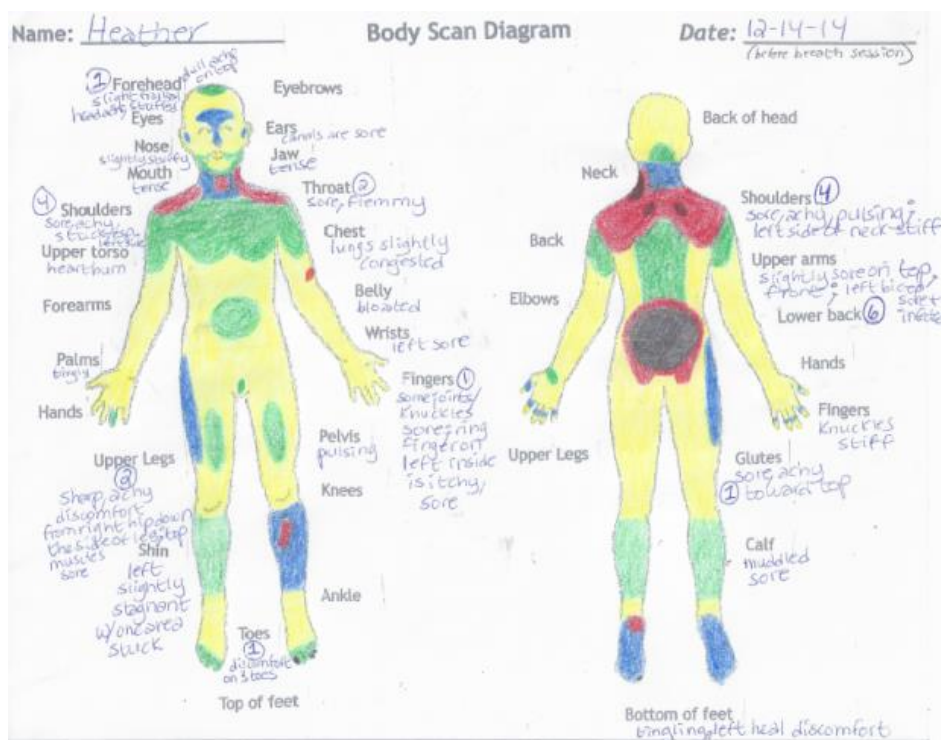
Terri (the facilitator) had mentioned that soul breathing allows the body to get rid of toxins in many different ways. Last night I woke up out of my sleep uncontrollably coughing. It felt like something was stuck in my throat. I pictured something lodged in the left side of my throat. As I write, this I can feel it every time I swallow. This morning I ended up coughing up a very tiny whitish yellow ball that looks like hardened plaque, but I feel like I have another one lodged that

is ready to clear out of my body and I think that the soul breathing put it in motion.

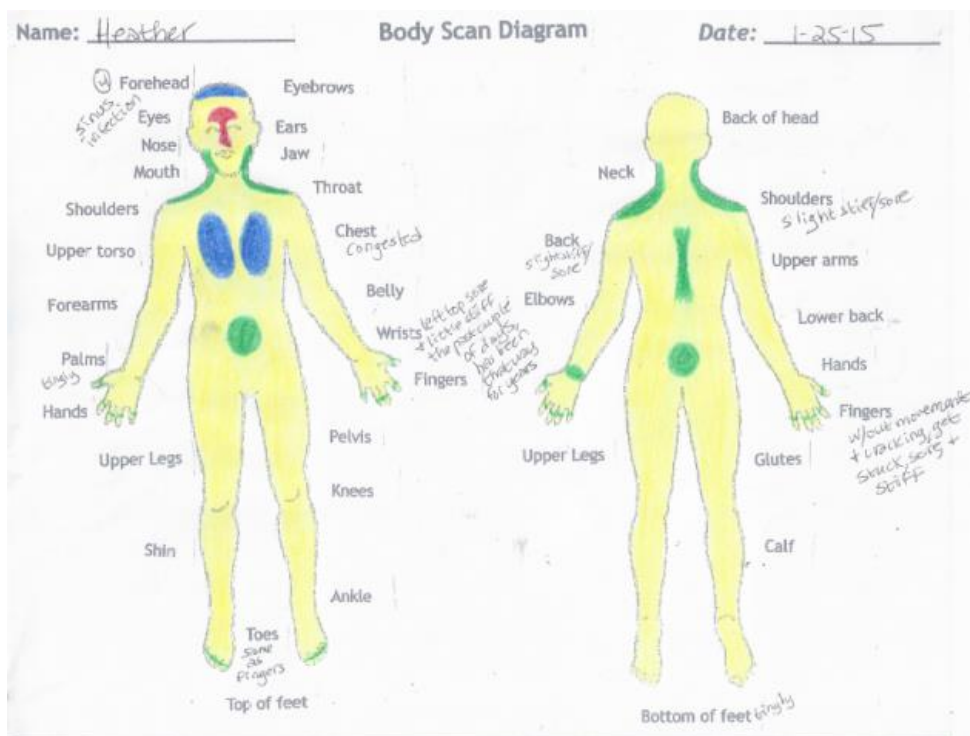
The cleansing within a week after each facilitated breath session is seen in her body scan diagrams; weeks 1 and 5 have the lightest colors and depict good energy flow. Specifically, the energy flow in her neck and shoulders gets better over the 6 weeks, and the energy flow in her lower back lightens dramatically over the 6 weeks, which are places where Heather tends to develop energy blocks. The energy flow in her chest and legs also became lighter from the pre body scan diagram to post body scan diagram (see Figure 9). This is also seen in Heather's post aura and chakra reading, where it was stated that *the blockages in the stomach and hip area are gone*. In her journal, Heather uses phrases such as *energy flow felt very open and alive* and *free-flowing energy*.

Figure 9: Heather's Body Scan Diagram

Pre



Post



Heather also referenced a cleansing of emotions in her journal during and after each facilitated breath session. She felt a *wave of emotions* course through her body during both sessions, which was released through tears. After each session Heather expressed that she *felt lighter*. These strong senses of energetic and emotional cleansing occurred only during the facilitated breath sessions and not the at home breathing practices. However, Heather does discuss throughout her journal that the at home breathing sessions made her feel *nourished, refreshed, purified, motivated, and energized*, and that she is able to *let out the emotions, let the emotions flow, and not allow them to get stuck*. This was also seen in the third-party observation form where it was noted that Heather *appears to have more energy* and that she is *a little more outgoing with her emotions*.

A cleansing of physical and emotional pain was evident throughout Heather's journal and in her body scan diagrams. Heather mentioned in her journal that *I haven't been as sore and achy in my body as I usually am*, that *I rid myself of my emotional energy blocks*, and that when she did experience physical or emotional pain she *used the breath as a vehicle to get through the pain*. Throughout her journal, Heather discusses guilt and the emotional pain that it has caused her:

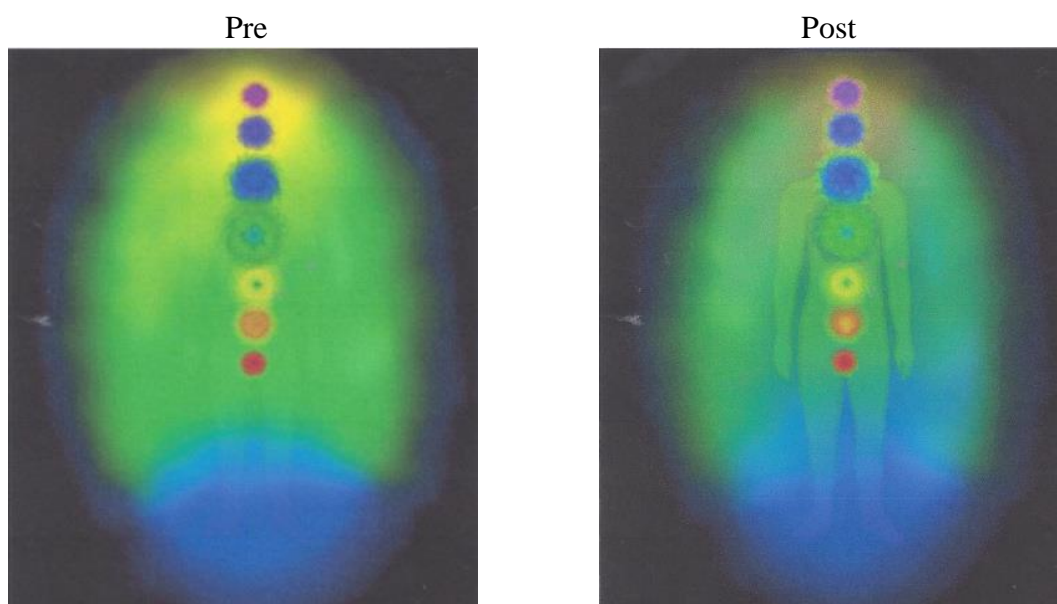
It is like my positive emotions really shine once my negative emotions get out of the way. Also, when I actually ACCEPT those negative emotions and let them pass without guilt, because guilt is what really throws me off. When I hold onto guilt, my emotions become out of whack and out of control, and I am not able to let my energy and emotions flow naturally.

During the first facilitated breath session the facilitator spoke the word guilt and that is when Heather felt the strongest *flow of emotions*. Heather's pre body scan diagram is fragmented, has darker colors, the numbers for pain are more frequent, and she uses

words such as *achy*, *sore*, *tense*, and *discomfort*, and her post body scan diagram is more interconnected, has lighter colors, the only pain noted was due to a sinus infection, and she uses the words *slightly sore* for a couple areas of the body (see Figure 9). The cleansing of emotional pain is discussed in more detail in the next theme of emotionally grounded.

Emotionally grounded. The theme of being emotionally grounded also emerged across all data. Heather reported in her journal that she felt *a greater overall sense of grounding*, that the breath practice *helps to ground her*, and that the breath is her *anchor*. This can be seen in her photographs where she has a stronger, more grounded stance in the post photograph than in the pre photograph (see Figure 8). It is mentioned in her post aura and chakra reading that she is *nicely grounded* and that she is *more drawn to things that ground her*. This is evident in the seven energy center resonant view where the space near her feet is bluer in the post reading (see Figure 10).

Figure 10: Heather's Seven Energy Center Resonant View



In her journal, Heather mentions on numerous occasions that she feels *more centered and balanced*, and that her *mind, body, and spirit are more connected and unified*, and her *breath, energy, and emotions are more connected and unified*. This is evident in the third-party observation form where it was noted that Heather *seems to be more balanced inside herself*. This can be seen by comparing pre and post body scan diagrams; the colors are more balanced and united in the pre diagram as opposed to the post diagram (see Figure 9).

Being more grounded, centered, unified, and balanced allowed Heather to become more *aware and mindful* of her body, mind, and spirit, and her breath, energy flow, and emotions. She mentions this regularly throughout her journal. A word count revealed that the words *aware* or *awareness* and *mindful* or *mindfulness* have a combined count of 21. Through the 6-week study this awareness grew stronger. This is also evident in her body scan diagrams as she was able to tune into the flow of energy and emotions through her body and intuitively express it. After doing a short meditation, Heather mentioned in her journal that *I could picture the energy flowing in my body. I think this research project is allowing me to become more in tune with my body*. She became *more sensitive* to emotions and allowed herself to *feel more* and *let the emotions flow* instead of *pushing the emotions away* in her body. She was able to have more *control* of emotions that used to *take over* her, such as anger, stress, and anxiety. Heather mentions different events in her journal that normally would have made her *angry, anxious, impatient, or tense*, but she was able to control those emotions and feelings in order to *remain calm, patient, and positive*. She mentions this new sense of control frequently throughout her journal. During a very busy week Heather stated in her journal that *Ever since the breath session I*

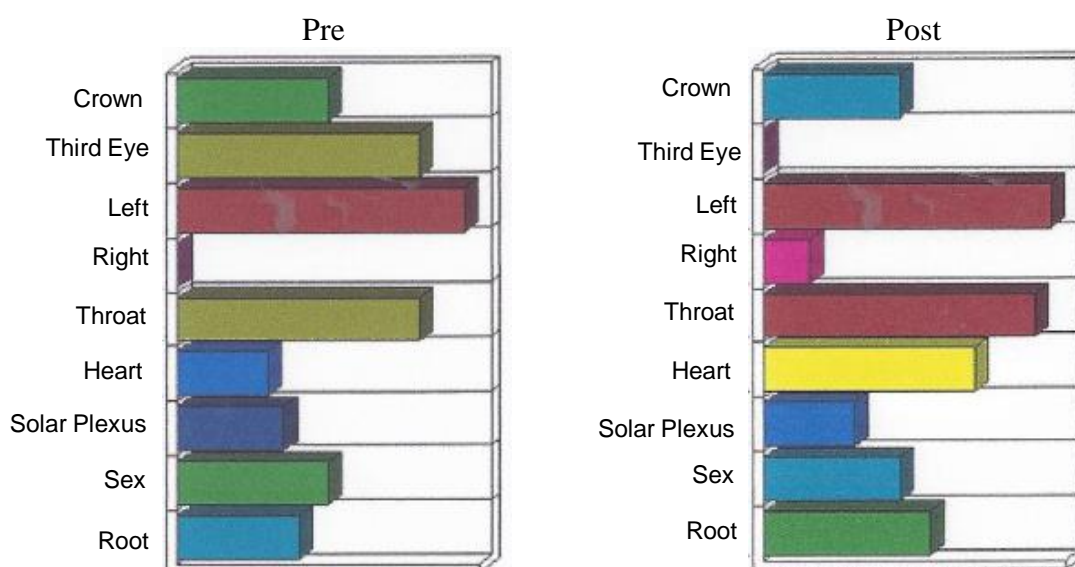
feel more in control of my feelings, emotions, and stress level. I don't get angry as much and my nervous system doesn't get as worked up as easily as it used to. This sensitivity and control were also shown in her post aura and chakra reading. She is now seeing things more sensitively.

Heather felt *positive emotions more frequently and profoundly*. The emotions that Heather portrayed in her journal the most were *calm, relaxed, happy, content, loving, peaceful, grateful, and compassionate*. Toward the end of the 6-week study, Heather noted the following in her journal:

There have been numerous instances where positive emotions have coursed through every cell of my being, whereas before it was only stress, anger, annoyance, and irritability that coursed through my whole being. It feels so much more open and freeing instead of closed and confined. I think that the breath plays a main role in that.

This shift can also be seen in her post aura and chakra reading. Her heart chakra went from *light blue to golden* in color (see Figure 11), and became *completely open and greatly expanded* and it was *flowing nicely*.

Figure 11: Heather's Chakra Chart



This shift was also referred to as an *expansion of unconditional love*. Heather could feel this shift and wrote about it often in her journal. As described above, this shift was also reflected in her photographs, body scan diagrams, aura and chakra readings, and third party observation form.

Movement. The theme of movement emerged from Heather's journal and body scan diagrams. Movement was the theme most discussed in Heather's journal, and the word movement had a word count of 17. She suggests through her journal entries that movement, through *cracking, stretching, Yoga, and toning, made the effects of the conscious breathing stronger*. These movements *helped the breath move the energy and emotion through her body*. In most instances where Heather writes about the breath *clearing and cleansing* the body, she mentions that *movement helped or allowed the breath to clear out the toxins, negativity, and stagnation* in the body. During the facilitated breath sessions the facilitator would have the participants tone at different parts throughout. This consisted of humming and moving around all parts of the body. Heather noted that before toning she could feel *concentrations of energy and emotion in certain areas* of the body, but after the toning the energy and emotion would *disperse*. Heather also noted that through the six-week study it was easier for her to *stretch and crack the tension out* of her body, whereas before certain areas of her body would become *stiff, sore, and stuck with tension*. This is also evident in her body scan diagrams where areas of her body that needed to be *cracked or stretched* due to being *stiff or sore*, especially the neck and back, become areas where less pain and energy blocks are experienced by the end of the six-week study (see Figure 9).

Openness. Openness was another theme that emerged across all data. Heather mentions in her journal that she is more *open, receptive, and present*. In her post aura and chakra reading it was stated that she is allowing herself to be *more exposed* and the *expansion and shift* in her heart chakra has made her *more open*. It was stated on the third-party observation form that Heather is *open to more variety of beliefs*. In the post photograph her shoulders are more open than in the pre photograph (see Figure 8). The energy flow in her body also became more open and this can be seen when comparing her pre body scan diagram to her post body scan diagram (see Figure 9). Heather also stated in her journal that she is experiencing more *acceptance*. In her post aura and chakra reading it was said that she is *more accepting and more go with the flow*.

Confidence. The theme of confidence was seen across most of the Heather's within-case data. In the post aura and chakra reading there was a shift in Heather's throat chakra, which made her *feel bolder and more honest with feelings*. Her solar plexus *relaxed and shifted from "I can do this" to "I did this,"* which led to a *new way of thinking and a different perception*. It was stated during the post aura and chakra reading that *The self-esteem and knowingness I carry has more pillars around it, so more stability. I won't be as wishy-washy and will be more of a leader*. The shift in Heather's heart chakra, from light blue to golden in color, *went from desire to believe, to confidence and respect*. See Figure 11 for visual of shifts in these chakras. Heather's feminine energy *opened up*, meaning that she *can handle situations* (see Figure 12).

Figure 12: Heather's Balance Graph

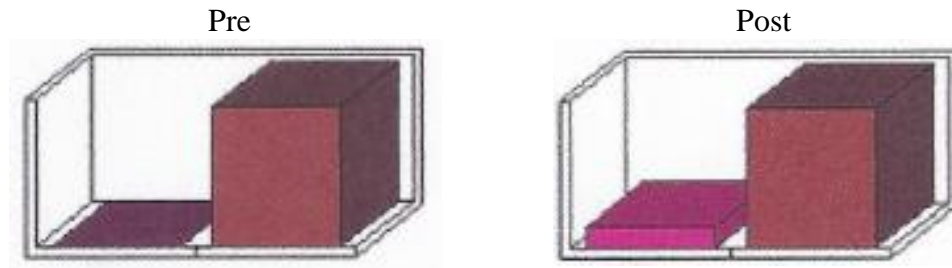
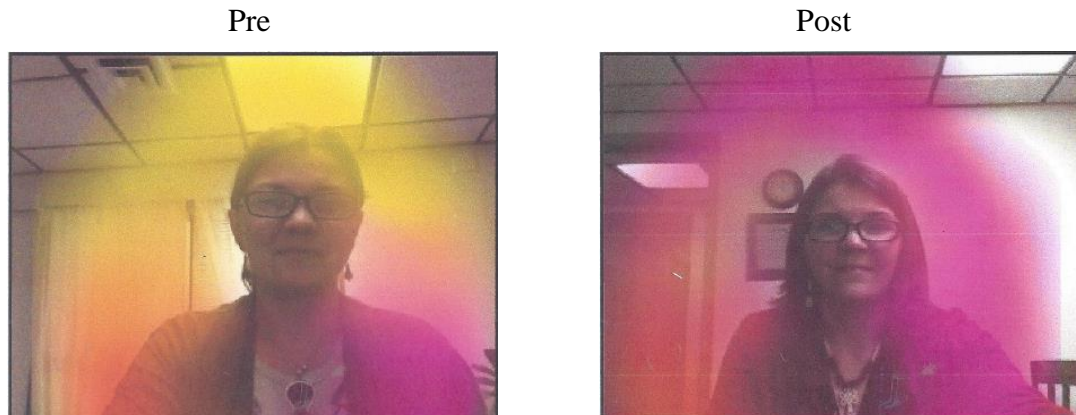


Figure 12. Graph shows balance of feminine yin energy (left) and masculine yang energy (right).

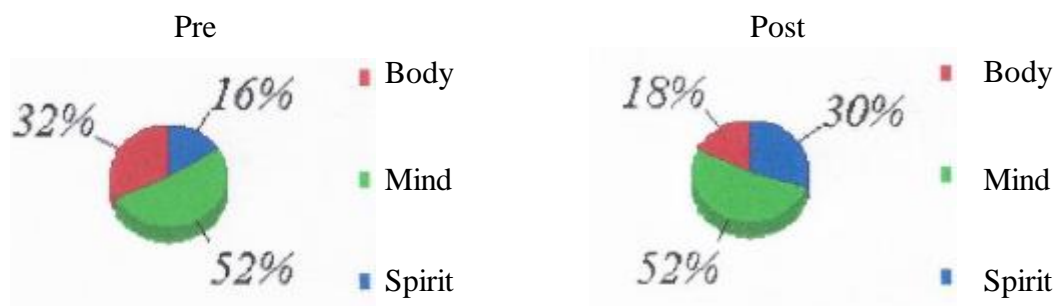
In the post photograph Heather has a more confident stance than in the pre photograph, which is evident in the way she holds herself (see Figure 8). Confidence can also be seen on the third-party observation form where it was said that she is *a little more outgoing with her emotions*.

Heather does not mention confidence in her journal until after the last facilitated breath session. During the breath session, the facilitator spoke words and phrases to Heather that had to do with confidence. Heather wrote in her journal that after those words and phrases were spoken, she felt a *wave of emotion, started crying*, and then after the wave passed she was *filled with peace, joy, gratitude, safety, love, and confidence*. In her last journal entry she mentions that she *feels stronger and more confident*.

Spiritual growth. The theme of spiritual growth is evident across all of Heather's within-case data, mainly in the aura and chakra readings. The aura photo (see Figure 13) shows that in the post reading *yellow has moved out and violet has embraced her*, which means she is in a *more perceptive mood, visionary, knowing*.

Figure 13: Heather's Aura Photo

Heather's crown chakra and third eye chakra shifted to *a more angelic energy*. The crown chakra changed *from green healing to blue spiritual growth and connection* (see Figure 11). The third eye changed from orange to violet, meaning *the profoundness of seeing things differently, now clairvoyant* (see Figure 11, graphic color appears greenish gold, but full report states orange). Her masculine energy *opened up and became a light, soft pink*, which is *angelic or visionary energy* (see Figure 12). Heather's post seven energy center resonant view shows *more blue all around, so more spiritual growth* (see Figure 10). On the mind, body, and spirit graph, her spirit grew from 16% to 30% (see Figure 14).

Figure 14: Heather's Mind, Body, and Spirit Graph

In Heather's pre aura and chakra reading there were two white balls of energy in her aura photo that she was told were her *spirit guides*. During her post aura and chakra reading those spirit guides were still present and she was told it is *part of the spiritual growth*. During the last facilitated breath session, the facilitator would whisper words and phrases in Heather's ear. Toward the end of the session she told Heather that her angels were there with her. Heather immediately saw and felt her grandfather, grandmother, and great-grandmother, who have all passed away. This was an emotional and profound experience for Heather, which she discusses in her journal. She never experienced anything like that before. Heather also mentions in her journal that through the course of the 6-week study she experienced *growth, expansion, and transformation in many areas*, mainly in the *spiritual domain*. This also increased her *intuition* and she mentions in her journal that she can *sense more* and she *can trust it*.

Heather's six themes of cleansing, emotionally grounded, movement, openness, confidence, and spiritual growth were the strongest themes that emerged in her within-case analysis. Next, we will discuss Ann's within-case analysis.

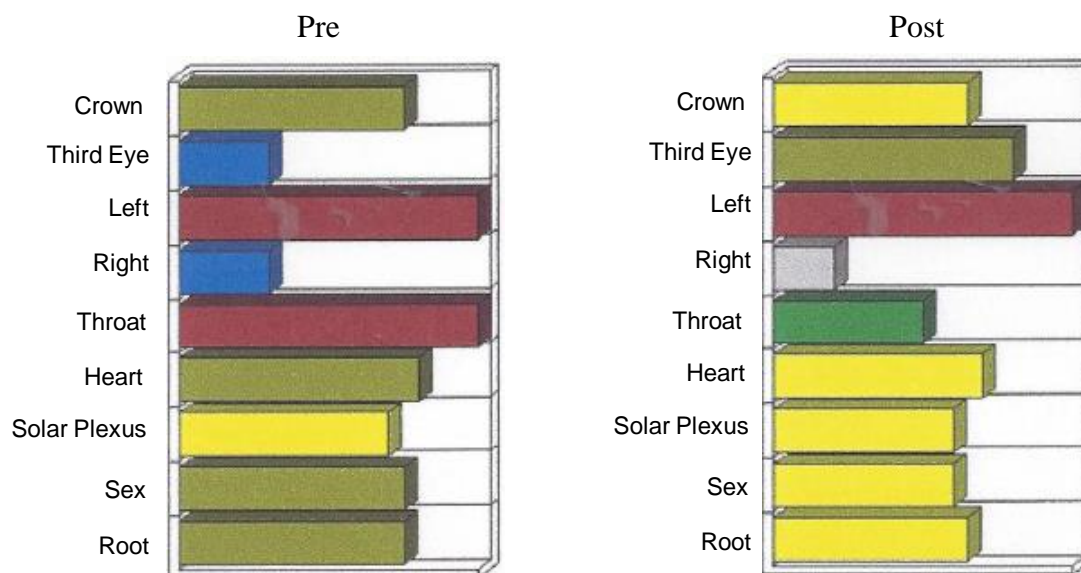
Case Study #3: Ann

In this section we describe the results of Ann's within-case analysis. Four themes emerged. These themes include confidence, focus, intuition, and release.

Confidence. The topic of confidence was strongly noted in both Ann's aura and chakra readings and the journal entries. In comparing the pre and post aura and chakra readings, there were three chakras that relate to confidence that all showed growth. The throat chakra energy reading increased, denoting *speaking up more, growth, and confidence*. This was also reflected with a change in color of the throat chakra from red to

green, portraying letting go of a protective layer and increased *kindness* and *open communication* (see Figure 15).

Figure 15: Ann's Chakra Chart



The solar plexus chakra showed growth as it opened through the breath and a heightened confidence was attained. The heart chakra changed from orange in the pre aura and chakra reading, which signified a *wanting of life's passion*, to a gold heart chakra, showing she is now *embracing her gift with confidence* (see Figure 15, graphic color appears greenish gold, but full report states orange). The final change in Ann's aura and chakra readings were in her color sign which went from orange-yellow to vibrant yellow portraying *positive energy* and *optimistic confidence*.

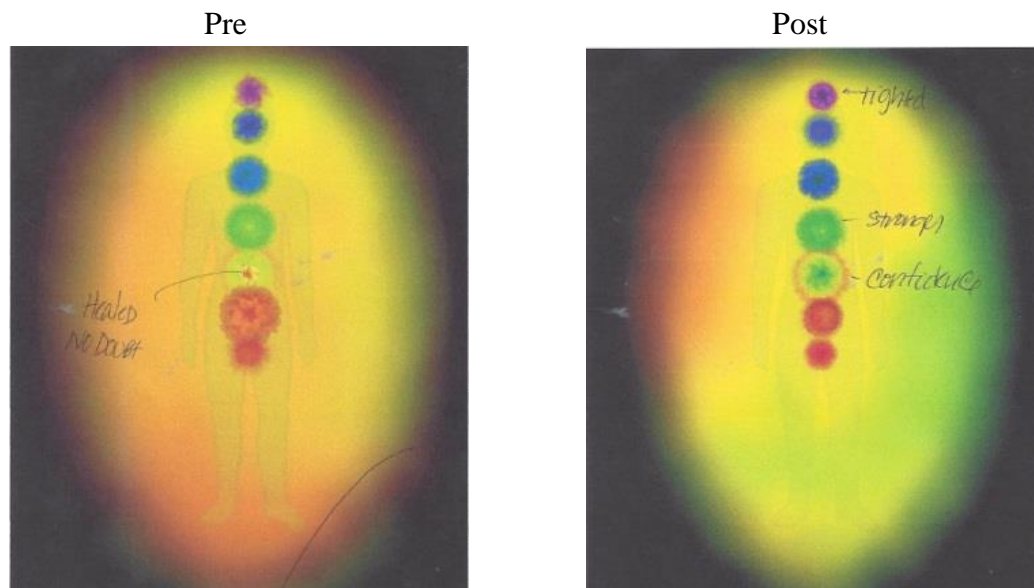
Ann's journal had comparable findings in the growth of confidence but specifically in the area of voicing her thoughts and standing up for her beliefs.

I am finding that my voice and my confidence are getting stronger in hard situations. I did my breathing practice and found I was feeling rooted and strong after. Today was a tough and tiring day along with confronting a difficult situation. Oddly, I didn't feel as stressed about it as I did before. I feel more positive and balanced in standing my ground.

Focus. Many comments regarding focus were highlighted in Ann's aura and chakra readings and journal entries. Awareness, being alert, balance, and connection were all common topics that were brought out within this data.

In the post aura and chakra reading, the root chakra decreased, representing a reduction in worry. Ann sensed being more relaxed, attentive, and balanced after the facilitated and daily breathing sessions. Increased focus was shown in the post aura and chakra reading where five of the chakras became a vibrant yellow (see Figure 15). This spotlights *awareness* to the future along with *joy*. The final focus element was the interconnection of the chakras. The pre chakra and aura reading had some chakras turning counter clockwise and others clockwise. The post chakra and aura reading showed all the chakras tightly rotating clockwise (see Figure 16).

Figure 16: Ann's Seven Energy Center Resonant View



Ann's journal entries further noted a feeling of being focused and in tune.

I did my breathing session for 10 minutes and it cleared my scattered mind and made me more aware. Afterward, I felt rooted and balanced. It feels great.

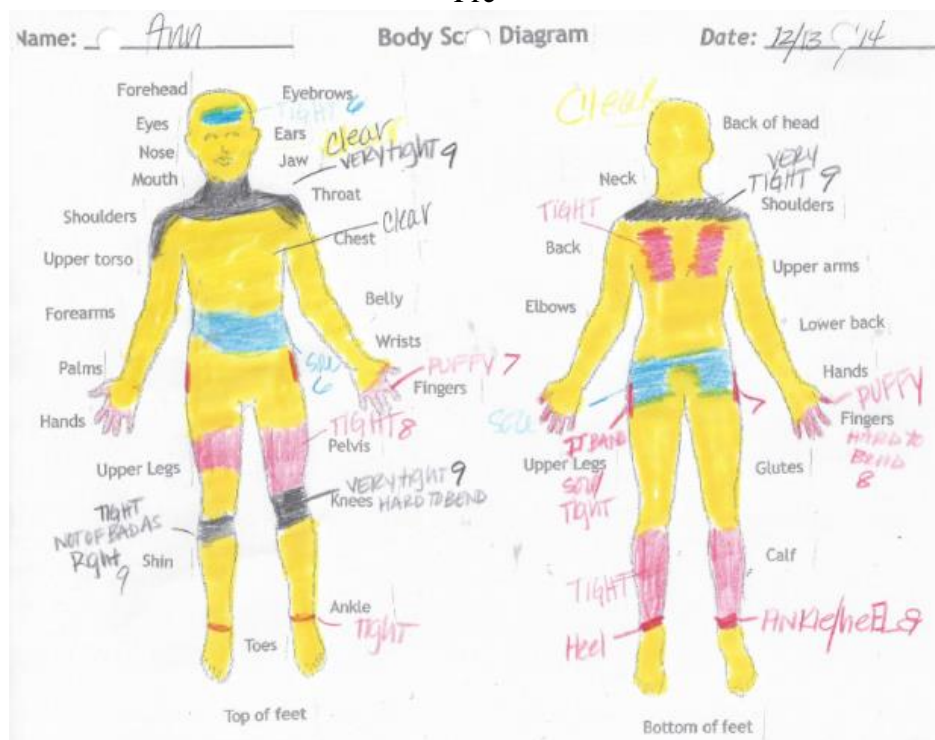
There were also many entries after the breath sessions where Ann's body, mind, and emotions were at *peace, alert, and calm*.

Release. Ann's body scans, journal entries, photographs, and third-party observation all document a physical, mental, and emotional release after the daily and facilitated breath sessions. This release was consistent with each breathing session, but was also found to dissipate throughout the day.

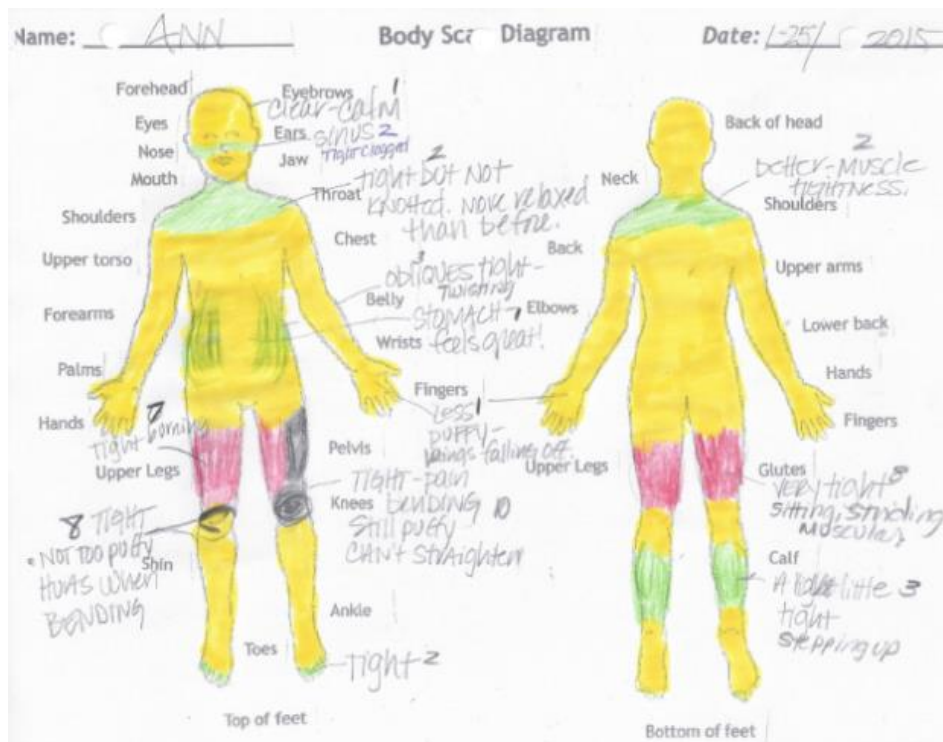
The body scan diagrams showed a physical depletion of shoulder and neck pain over the course of the data collection. The pain in the first week was rated at the highest level and by the end was noted to be much less sore (see Figure 19). Also, the week after each of the three facilitated breath sessions, Ann's forehead pain disappeared. This can be seen in the post body scan diagram (see Figure 19). A concluding physical release was the puffiness Ann felt in her hands, feet, and ankles. This inflammation was intense in the beginning of the 6 weeks and by the last week was gone. Ann's third-party observation also noted these changes in physical stature, *you look healthier* and with her behavior and emotional state, *you act nicer and kinder*.

Figure 19: Ann's Body Scan Diagram

Pre



Post



The journal entries noted a variety of different releases. The emotional freeing of sadness and exhaustion were noted:

I felt like my brain was in a zone, not focused at all. Still feel heavy and detached too. Bubbling emotions from morning through afternoon—exhaustion, patience, and sadness. After my five minute breathing session I feel a bolt of relaxation and became alert.

The facilitated breath sessions brought about the strongest emotional, mental, and physical releases. Journal entries after these three sessions noted crying during one session as well as shoulder and neck pain, and lower pelvic scar discomfort subsiding. Also, the release of feeling mentally scattered seemed to disappear afterward. The feeling of an internal scrub brush cleaning *everything out* was also noted after these facilitated breath sessions.

Ann's photographs provided an external glimpse into her overall release. In comparing the pre and post photographs, Ann's skin looks more radiant, her body physically relaxed, and an overall glowing look of healthiness (see Figure 18).

Figure 18: Ann's Photographs

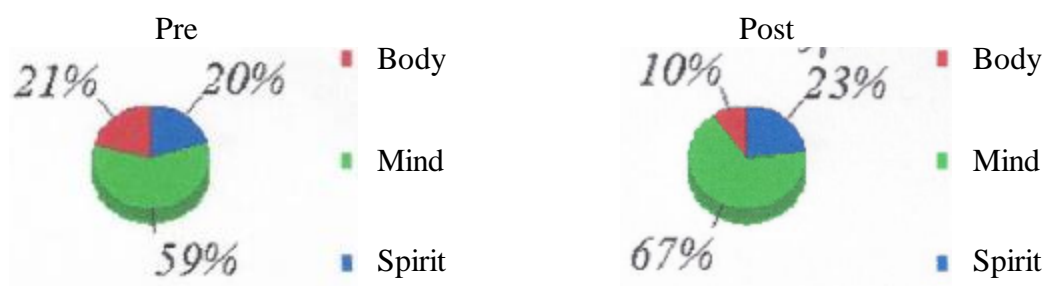


It was also noted that the photographs in weeks 2, 5, and post exuded more energy, she appeared less tense, and portrayed more happiness than the other weeks.

Intuition and trust. The final theme that resulted from Ann's within-case analysis revealed a heightened sense of intuition along with trust in herself and the world. The areas highlighted for this theme were centered on an increase in spiritual awareness and faith in the way life unfolds. Both Ann's aura and chakra readings and journal notes featured these topics.

A powerful factor in Ann's post aura and chakra reading was the shift in her spiritual growth from 20% to 23% (see Figure 19) and spiritual growth within the chakras.

Figure 19: Ann's Mind, Body, and Spirit Graph



Many of the chakras moved from dark colors, noting shielded emotions, to lighter colors that bring in divine energy (see Figure 15). The balance graph noted that the feminine energy lightened, portraying divine growth (see Figure 20).

Figure 20: Ann's Balance Graph

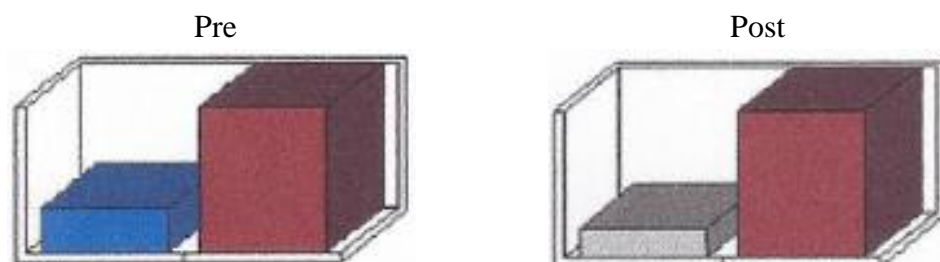
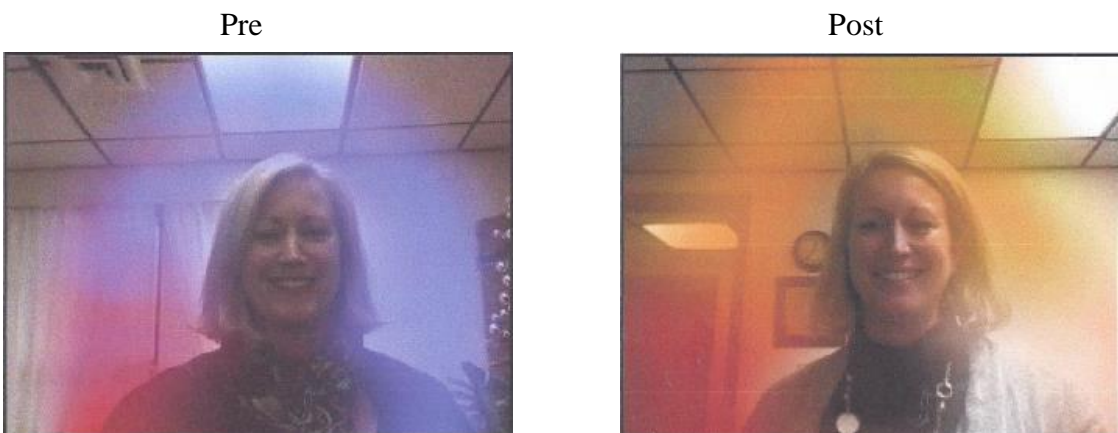


Figure 20. Graph shows balance of feminine yin energy (left) and masculine yang energy (right).

Furthermore, the third eye chakra energy reading grew, denoting spiritual growth, *belief*, and *trust*.

The aura photo of the post aura and chakra reading indicates green on top highlighting an *expansion in trust*, and signifies Ann's *guardian angels are with her* (see Figure 21).

Figure 21: Ann's Aura Photo



The outer colors on the seven energy center resonant view were initially red and changed to green and dark yellow in the post reading, implying *no barrier of resistance, trust, and healthy growth* (see Figure 16).

The crown chakra energy reading also grew, signifying a connection to the divine. The solar plexus energy reading showed the most significant growth, meaning Ann *wanted*, she *received*, and now she is *validated*. Frequency, which represents the distance one's aura can travel, lightened from orange to bright yellow designating *trust* and being *open to change*. Finally, volume, which represents the amount of energy one projects, changed from orange/red to green/yellow portraying *less anxiety* and letting life's issues *roll off*.

Ann's journal included entries that correlated with the aura and chakra readings.

Ann documented her heightened ability to *go with the flow*.

Did breathing in afternoon. Release!!! Feeling lighter and more at ease. Able to go with the flow more and not be as stressed as usual.

There were also many areas connected to intuition that were noted. Ann found her dreams were dark at times and then vibrant at other times. She encountered one dream where she woke up remembering the word *unite* and feeling a strong sense of peace. She found that uniting was a theme for that day as she and her family attended a family funeral. In another instance, she saw a vision of a grandparent during a facilitated breath session.

It was so real—I even reached out to touch her. She was laughing and nodding. It was moving—I cried. When we finished, I had so much energy moving through my body. Love that feeling not like caffeinated energy—the real thing!!!

For Ann, the sense of knowing and following her intuition grew and was a continual theme throughout the data collection time period.

Ann's four themes of confidence, focus, release, and intuition and trust were the strongest themes that emerged in her within-case analysis. Next, we will discuss the cross-case analysis.

Cross-Case Study

In this section we describe the results of our cross-case study analysis. Four main themes emerged. These themes include the element of time, grounding, intuition and spiritual growth, and interconnectedness.

Element of time. It was clear that the effect of conscious breathing on emotion and energy flow varied depending on the element of time. Some of the responses were immediate and did not linger, whereas other responses developed over the course of the

6-week study. Furthermore, there were some differences in the participants' experiences related to the short home breath practice versus the 60-minute facilitated breath sessions.

The effect of conscious breathing on emotion was variable within the element of time. During the home breath practice all participants described an immediate feeling of calm. Ann occasionally experienced waves of other emotion such as sadness or frustration. During the facilitated breath sessions both Ann and Amy experienced waves of sadness. All 3 participants described *waves of emotion* and had emotional release through tears. All participants experienced enhanced positive emotions such as relaxation, happiness, love, contentment, gratitude, and compassion as a result of both the home and facilitated breath practice. However, Amy only experienced these emotions immediately after the breath practice, whereas both Ann and Heather experienced them immediately after and over the duration of the study. Ann and Heather reported being able to develop and build acceptance of their emotions throughout the study. They also both had expansion in their heart chakra on the aura and chakra reading, showing more capacity for love and compassion. Amy reported the time of day made a difference in her breath practice experience noting that more stressful days correlated with an evening breath practice.

The effect of conscious breathing on energy flow was also variable within the element of time. All 3 participants reported *tingling* and a sense of *vibration* during and immediately after the facilitated sessions. Amy and Ann also experienced this with the home breath practice, but described this as *more intense* during the facilitated sessions. Amy noted this sensation as a feeling of being *less solid* in physical form. Both Amy and Heather reported clenched hands and fingers during the facilitated sessions without the

ability to release them until well after the session. The home and facilitated sessions lead to a feeling of being *oxygenated*, *nourished*, *energized*, and *refreshed*. Ann noted being more *energized naturally* during the course of the 6 weeks and Amy noted awareness of the restrictions in her breathing pattern and the ability to expand her breath during the session. Longer lasting effects on energy flow included an intuitive sense of increased energy flow and decreased inflammation and pain over the course of 6 weeks as shown through the body scan diagrams (see Figures 4, 9, & 17) and journals. Heather and Ann's body scans showed increased energy flow within the week after the facilitated breath sessions. Heather also had evidence of removal of energy flow blockages on her post aura and chakra reading. Heather and Ann's readings showed significant changes in energetic patterns from pre to post, however Amy's reading didn't show as many changes.

We also found results that encompassed both elements of emotion and energy that developed over the course of the 6-week study. All 3 participants showed less facial tension and an expression of enhanced contentment on the post photograph (see Figures 7, 8, & 18). Heather reported being able to recognize and gain more control over her emotions and energy flow. Heather and Ann's third-party observation forms stated more changes within the realm of emotion and energy than the results of Amy's third-party observation form.

Grounding. Characteristics of grounding which emerged through the analysis process include confidence, trust, and communication. The breath practice led to an increased sense of emotional and spiritual grounding for all 3 participants as shown through changes in the root chakra in the aura and chakra readings. Through the photographs and aura and chakra reading Heather and Ann both portrayed more

confidence at the end of the study. The post aura and chakra reading portrayed this confidence through change in the solar plexus chakra and the post photographs portrayed this through a taller more assertive posture and facial expression (see Figures 8 & 18). The changes in the root chakra also led to increased trust for all 3 participants. Participants reported this in various ways, most noticeably in the journals and aura and chakra reading through words such as *go with the flow* and letting things in life *roll off of you*. Protective layers of energy went away which allowed the participants to gain more capacity for trust. All 3 participants also showed a change in the throat chakra (see Figures 6, 11, & 15), which allowed for more trust and confidence in communication. This was most evident in Ann's data as she reported more strength and openness in communication through being able to *better speak my mind*, and *gaining my voice*. Heather and Amy also portrayed this through *expressing myself more without holding back* and *trusting words more*.

Intuition and spiritual growth. All 3 participants exhibited an increase in the spiritual component of the post aura and chakra readings (see Figures 5, 14, & 19). This was evident with *expansion* and *amplified strength* in the third eye and crown chakra for both Ann and Heather and through the removal of a protective layer in the throat chakra for Amy, which *allowed trust in intuition to step up*. The post aura and chakra reading also showed that masculine and feminine energies became more balanced for Heather and Ann, which allowed for *growth in divine energy*. Intuition and spiritual growth was also evident through reports of increased frequency of dreams for Ann and Amy and increased perception and sensitivity to knowing for Heather. Heather and Ann both encountered

presence of their spiritual guides with the facilitated breath sessions and on the aura and chakra readings.

Interconnectedness. All 3 participants expressed a stronger interconnection between internal and external forces as a response to the breath practice. Amy noted *heightened awareness, attunement, and union between mind, body, and spirit* immediately following the breath practice, as well as states of *flow*. Heather and Ann's post aura and chakra readings both showed increased alignment and balance through the chakras (see Figures 10 & 16). They both also felt more *awareness* of emotion and energy flow and an *increased sense of interconnection* with the breath practice and throughout the 6 weeks of the study. Heather noted that the breath served as a *vehicle* and an *anchor* for emotional and energetic *balance*, which provided more *overall strength* in these areas.

The shared four themes of element of time, grounding, intuition and spiritual growth, and interconnectedness were the strongest themes that emerged in the cross-case analysis. Next, we will discuss the interpretation of these results.

Discussion

The purpose of this chapter is to interpret the findings of our research study. We will start by discussing the findings that are supported by the literature. This is followed by a discussion on unexpected findings, and whether those findings are supported by the literature or are new findings. Finally, we discuss various implications of this research project, including implications for holistic health, community and education, and future research. This chapter ends with a brief summary and our conclusion.

Findings Supported by the Literature

A number of our results are consistent with what is found in the literature. In this section, we discuss specific themes and how they relate to the literature. The themes discussed are interconnectedness; loosening and surfacing, cleansing, and release; grounding; focus; and openness. We also discuss our interpretation of these findings.

Interconnectedness. Rama (2008) suggests that the breath brings about an interconnection between the body and the mind, which is consistent with the theme of interconnectedness that we experienced in our study. Also consistent with the positive impact of controlled breathing on emotional connection and awareness cited in the study completed by Chow et al. (2008), we experienced heightened awareness externally, and most profoundly internally on a physical, emotional, and energetic level. Not only does this finding suggest that conscious breathing serves as a tool to become more aware of our emotions and of the presence of energy in our bodies, but it also suggests that conscious breathing may actually help unite the body and the mind to create a freer, less fragmented energy flow.

Loosening and surfacing, cleansing, and release. Several findings from the literature support aspects of the related themes of loosening and surfacing, cleansing, and release. We experienced increases in physical and energetic sensations, which is consistent with the text of Mann (1973), who cites that deep breathing can increase the pulsation of energy through tingling, vibration, and other physical sensations in the body. We also described our emotions as *waves of emotion*, which is supported by Rosenberg's (1998, p. 127) definition of emotion as "a form of energy in motion". The fact that we experienced crying with corresponding changes in our breathing pattern as well as general expansion of the breath as a response to the breath practice is consistent with Latey's (1996) suggestion that the use of breath works as an agent for expelling feelings from the body through actions such as crying and changes in breathing range, rhythm, and depth. Furthermore, we described a decrease in physical pain throughout the study, which is supported by Brown & Gerbarg (2005a), Hendricks (1995), and Stanley et al. (2011). These findings imply that conscious breathing helps facilitate emotional surfacing, and in some cases emotional release. The increase in physical sensations and reduction in muscle tension and pain supported by the literature as well as our additional finding of positive changes in energetic patterns over time suggest that conscious breathing may also lead to physical loosening and release, resulting in an increase in energy flow.

Grounding. The theme of grounding was most supported by the literature from the aspect of emotional grounding. We experienced relaxation, calm, and reduced stress as an effect of the conscious breathing practice, which is consistent with other studies that have linked conscious breathing to reduced stress (Brown & Gerbarg, 2005a; Kimura et

al., 2005), relief of anxiety (Brown & Gerbarg, 2005a; Hayama & Inoue, 2012; Peper & MacHose, 1993), and activation of the parasympathetic nervous system (Pal et al., 2004). The related theme of interconnectedness and enhanced awareness of emotions is supported by Chow et al.'s (2008) finding of the positive impact of conscious breathing to emotional connection and awareness as discussed above. Furthermore, Heather's case study description that she had better control of her emotions is supported by Hendricks' (1995) claim that conscious breathing contributes to emotional mastery. These comparable findings from our study further endorse that conscious breathing is associated with increased emotional awareness and emotional grounding. Additionally, our study found a connection to other characteristics of grounding such as the theme of confidence as well as intuition and trust. This suggests that conscious breathing has a grounding effect that goes beyond the emotional realm as it may also increase levels of self-confidence as well as enhance intuition and trust.

Focus. The theme of focus emerged from Ann's case study description of increased alertness and awareness, which is consistent with the findings from the literature that conscious breathing improves attention and mental focus (Brown & Gerbarg, 2005b) as well as enhances mental concentration (Hendricks, 1995). Moreover, the improvements in features of centering and balance as well as alignment of the chakras in Ann's post aura and chakra reading suggests that the theme of focus can be interpreted beyond the mental level. Not only does this study suggest that conscious breathing increases mental focus, but it also indicates that conscious breathing may facilitate a more balanced and cohesive energetic pattern. This theme is closely related to the themes of

interconnectedness and grounding, thus our interpretation that conscious breathing may increase energy flow is consistent.

Openness. The theme of openness emerged from Heather's case study analysis, and although it isn't directly supported by the existing literature, we were not surprised by this finding and wanted to discuss it briefly. This theme is most closely related to the themes of loosening and surfacing, cleansing, and release, and the physical signs of increased openness warrant the same interpretation as mentioned in this section above. The presence of more emotional openness as well as a more open perspective in worldview keeps this theme unique enough to be its own. The fact that this theme emerged in Heather's case study and not in others could be due to Heather's trip to India during the data collection phase of the study. Her experiences on this trip may have expanded her perspective of the world and opened her up to more variety of beliefs.

The themes supported by the literature include interconnectedness; loosening and surfacing, cleansing, and release; grounding; focus; and openness. Subsequently, we discuss the findings that were unexpected.

Unexpected Findings

There were numerous unexpected findings that emerged from our study. These findings include spiritual growth, the element of time, confidence, ambivalence, movement, and differences between cases. Element of time, confidence, and ambivalence were themes that were not anticipated from what we came across in the literature. Spiritual growth and movement were elements that were noted in the literature; however this was not our initial focus, and these themes emerged much stronger than we anticipated. We expected differences between cases; however, the specifics of these

differences were unforeseen. These unexpected findings are noted in this section with explanations and opinions about why they have an impact on the study results.

Spiritual growth. The increase of spiritual awareness surfaced in the cross-case analysis and was even more profound in the within-case analyses of Heather and Ann. The post aura and chakra readings found noteworthy increases in all participants' spiritual growth. Heather and Ann's post readings and journal entries noted heightened awareness of interconnection, transformation, and an increase in intuition. One reason for these increases could be the effect of conscious breathing on the balancing and connecting of our energy patterns. Another reason is that there was an increased connection of the mind, body, and spirit that was brought about from the continued breathing practice.

The literature contains information on conscious breathing and spiritual growth. Hendricks (1995) notes that conscious breathing facilitates psycho-spiritual growth and Rama et al. (2010) finds a connection of conscious breathing to the center of the cosmos bringing with it the mind-body relationship. According to Acharya (2011), conscious breathing activates the energy vibrations, which awakens the spirit. The strong overall impact that spiritual awareness had in this study warrants more research on this topic.

Element of time. The element of time was a theme that emerged from the cross-case study analysis and plays a significant role in the interpretation of our findings. Experiences of interconnectedness and grounding, emotional surfacing and release, expanded breathing pattern, and sensations of tingling and vibration were consistent effects during and immediately after the breathing sessions, which lead us to believe these are a direct result of the conscious breathing practice. Other results were effects that

were experienced over time and that were perceived to have been a result of the conscious breathing practice. But, due to differences in the experience of the case study participants, as well as inconsistency in variables and life experiences during this timeframe, it was difficult to discern if these were a direct result of the conscious breathing technique or if other variables contributed to these changes. Research on this topic was not found in the literature.

Confidence. The increase of confidence in this study showed an influential impact on the participants and was a theme that was not anticipated. This increase in confidence may have stemmed from a healthier sense of energy flow, emotional strength, and heightened communication. We also detected a link between conscious breathing practice and the balance of the mind, body, and spirit as a potential reason for this growth. Ekerholt and Bergland (2008) note that breathing binds communication between the body and conscious thought providing space for reflection and cognitive understanding. This helps people to make sense of their body and feelings, thus their identities. According to Acharya (2011), people can become more balanced and mindful, which can boost self-confidence.

Ambivalence. The theme of ambivalence emerged from Amy's within-case analysis, and was unexpected as a result of this study. Amy notes that her participation as a subject in this research project during the data collection phase strengthened her subjectivist epistemology as it made her question further whether one can truly identify a direct cause and effect with so many interconnected variables, especially in the realm of energy and human physiology and psychology. However, being the researcher in this process brought out and reinforced her post-positivist paradigm roots and behavior

patterns, and she found herself desiring objectivity. This brought about an even larger gap in her bi-paradigmatic mindset, and she was aware of this internal conflict. For example, although she truly believes in the existence of life energy, this dual mindset made her both desire the objectivity of capturing energy readings on paper and also question its accuracy at the same time. Although it is possible that the conscious breathing practice may bring about emotional ambivalence, this declaration leads us to believe that this theme did not emerge as a direct result of the conscious breathing practice, but rather as a reflection of the gap in her functioning paradigms and worldview at the time of this study. This internal conflict could also have brought about her inconsistency in the elements of acceptance, control, and emotional expression. There was not research in the literature related to conscious breathing that documented this theme.

Movement. The theme of movement emerged from the data and we found this theme important due to the use of movement's power as it assists the breath to move the energy and emotion through the body. Heather noted that cracking, stretching, and yoga made the effects of conscious breathing stronger. For Ann, a cardio workout before conscious breathing provided for a more spirited breathing session. Toning in the facilitated breath sessions supported Amy to expand her breath and Heather to disperse the concentrations of energy and emotion. The literature documents many types of movement, exercises, and postures as partners in conscious breathing. The Three Fist Theory by Latey (1996) notes that opening the muscles through breathing by yawning, laughing, and other movements help expel volatile feelings. Schwartzmann (2012) explains the theory of character armoring, blocked strong feelings and emotions that are held in our posture and stance. When movement is combined with the breath these

blocked emotions can be loosened and released. Miller (2010) states that movement helps to deepen respiration, release energy, and enhance well-being. Kalawski & Pablo (2013) expounds on the benefit of movement through Alba Emoting. By reproducing breathing, postures, and facial patterns emotions were released. Finally, according to Kimura et al. (2005), deep breathing practice, visualization of internal energy flow, and movements increase oxygen delivery throughout the body, which leads to an increase in life energy, and promotes spiritual and physical health.

Differences between cases. Although all 3 participants experienced positive changes, we each had unique individual themes that did not show up in the cross-case analysis. Additionally, Heather and Ann's data showed more overall changes than Amy. One reason for this could be due to Amy's ambivalent mindset during the study. Another possibility is that, although a participant may detect a change internally, these changes may not be large enough to identify by external measures. It is also possible that a shift might be minuscule enough that it isn't perceived by the individual at all. Furthermore, each participant experienced different phenomena during this study and these variances are important to discuss. As noted earlier, Heather traveled to India and experienced many types of breathing, meditation, and yoga styles. These experiences opened various possible avenues for growth. Ann followed the audio body scan before her home breath practice on Sundays and found the results of the breath practice much more pronounced. She felt her conscious breathing was heightened because of the increase in her mind and body connection. Amy used mindfulness meditation after her breathing sessions as a means to integrate and notice how she felt 10-15 minutes afterward. A future research study that controlled for these variables would be informative. A final reason for the

differences across cases could be due to the individualistic and subjective human nature of breath, emotion, and energy. Each participant had foundational differences in physical, emotional, and energetic features, and it is important to consider that conscious breathing affects everyone differently.

Unexpected findings include spiritual growth, element of time, confidence, ambivalence, movement, and differences between cases. In the following section we discuss implications for holistic health.

Implications for Holistic Health

The findings of this research project point toward various implications for holistic health. Conscious breathing is a safe practice, and can be enhanced when taught by a facilitator. It can be practiced anytime and anywhere. Conscious breathing is a free, internal resource for overall health and well-being.

The themes that emerged from our analysis suggest that conscious breathing practices can serve as a tool for awareness of emotions and presence of energy. Conscious breathing can also play a role in the treatment of physical and emotional ailments, for instance it may help decrease pain and inflammation as well as relieve stress and anxiety. Conscious breathing could help individuals feel connected and grounded, increase confidence in those with low self-esteem, facilitate spiritual growth, enhance intuition, and improve focus. These factors can contribute to, and facilitate, emotional surfacing and clearing, and increased energy flow. The transformative powers of conscious breathing can strengthen the mind, body, and spirit connection in order to encourage wholeness. Furthermore, conscious breathing practices could be used as a resource for the holistic health practitioner before seeing a patient, in order to enhance

connection, feel more grounded, and be more present and open during the appointment. This may allow the practitioner to be well, and better able to positively contribute to the relationship between practitioner and client/patient. The client/patient can utilize conscious breathing during a holistic health appointment in order to improve groundedness and awareness, to become open to the healing process, and to enhance focus and confidence in the healing process. This could be especially helpful during energy healing work in order to enhance free-flowing energy.

Implications for holistic health include benefits for both the practitioner and the client as well as the collaborative element of these two roles. This research study also holds implications for community and education, which we will discuss next.

Implications for Community and Education

The findings of this research project point toward a plethora of implications for community and education. People are usually not mindful of their breathing and tend to take it for granted. Learning about conscious breathing can educate people on the importance of their breath and their breathing patterns, what their breath suggests regarding their health, and how they can use the breath to facilitate overall health, well-being, and wholeness. Furthermore, anyone can become a facilitator or educator in order to teach others about the breath. This can be done through community and public workshops, classes, and written educational material. Community workshops and classes could allow the members of that community to feel more connected. People can learn how to release stress and build up emotions through the use of conscious breathing practices. Caregivers and parents can learn conscious breathing techniques in order to help themselves and the loved ones that they care for, whether it be a child or an adult

with any number of physical and/or emotional ailments. People who exercise through the use of various movements would be another group of people who could benefit tremendously from being educated on conscious breathing. It may enhance the improvement of physical, emotional, and energetic ailments, bring more focus and grounding, and help them to feel more connected during their movement sessions.

Conscious breathing could help children deal with, express, and control the many emotions that they face, could help them feel more connected and grounded when overwhelmed or facing stressful situations, and could help them calm down and focus. Conscious breathing may help children learn the skill of becoming aware of their body and emotions, and become connected within their bodies and with those around them. It may also strengthen their spirituality and intuition, and allow them to feel more grounded. This could promote a strong foundation for children to build on as they grow.

Our suggestions for community and education include: developing classes on breath awareness and conscious breathing techniques, using conscious breathing to help caregivers and parents support themselves and loved ones, using conscious breathing to enhance the benefit of movement, and helping children learn how to cope with difficult emotions. We also have recommendations for future research, which follows.

Implications for Research

After reviewing the literature on the effect of conscious breathing on emotion and energy flow, and reviewing the themes that emerged from this research study, there are numerous implications for further research. It would be beneficial to compare mindful breathing with controlled breathing to see whether being mindful of the breath has

different effects than controlling the breath. Furthermore, other conscious breathing techniques could be compared to see if any are more beneficial than others.

Another avenue to take would be to conduct a study on conscious breathing that examines specific themes that emerged from this research study: the element of time or the theme of confidence, for example. Since movement is a theme that emerged, and there is previous literature on using conscious breathing and movement together, it would be interesting to conduct a study that compares conscious breathing with movement to conscious breathing without movement in order to see whether movement enhances the effects of conscious breathing. There were also a variety of emotions that arose during this research study, so it would be beneficial to conduct future studies that research the effect of conscious breathing on a specific emotion, such as sadness or love.

In our study we define emotion as energy in motion. Our participants describe waves of emotion in the data collection, but we do not specifically examine how emotion and energy flow are connected. Conducting a study that explores the connection between these two elements could bring about some valuable findings.

Since our research study has some limitations, future research could address these limitations. Characteristics to consider in a future study design include the use of a larger sample size that is more representative of the general population, the addition of a control group to regulate moving variables, consideration of other external measures for psychophysiological and energetic changes, and a lengthier study to determine more long-term effects of the conscious breathing intervention.

Summary and Conclusion

Breath, emotion, and energy share an inherent relationship. Theories in the literature indicate that unconscious breathing patterns can suppress emotions and restrict energy flow. Our breath is a free, easily accessible resource that is within our conscious control; however the effect of conscious breathing on emotion and energy flow is not widely understood. Published research studies on this topic are scarce and limited; therefore the purpose of this study is to describe the effect of conscious breathing on emotion and energy flow. In order to answer the question, how does conscious breathing affect emotion and energy flow, we developed a quasi-experimental case study design, in which we conducted three individual case studies on ourselves over the course of 6 weeks. We collected and analyzed qualitative data. The results of the within-case and cross-case thematic analysis suggests that conscious breathing leads to an increased feeling of grounding and connection, increased confidence, and increased intuition and spiritual growth. Conscious breathing helps facilitate emotional surfacing, and in some cases emotional release. Reduction in pain and muscle tension, increased physical sensations, and positive changes in energetic patterns over time suggests that conscious breathing leads to an increase in energy flow. The subjective nature of this study as well as the lack of control of variables and narrow generalizability somewhat limits the findings.

To our knowledge, this is the first study that looked at the effect of conscious breathing on both emotion and energy flow. Our study provides important preliminary information for the role that conscious breathing may play to promote the holistic treatment of physical and emotional ailments, as well as the facilitation of spiritual

growth. The use of conscious breathing for the development of mental focus and confidence should also be considered. Community and public education on the significance of our breath and the teaching of conscious breathing techniques are important in increasing knowledge and practice. This free internal resource may have a profound positive impact on emotion and energy flow; however more research needs to be done. We hope this study will be used as a starting point for the development of future research on this topic.

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Appendix A

Body Scan Diagram

Name: _____ **Date:** _____

Body Scan Diagram

The diagram consists of two line drawings of a human figure, one facing forward and one facing backward. Various body parts are labeled with text. On the front view, labels include: Forehead, Eyes, Nose, Mouth, Eyebrows, Ears, Jaw, Throat, Chest, Belly, Wrists, Fingers, Pelvis, Knees, Ankle, Toes, Shin, Upper Legs, Hands, Palms, Forearms, Shoulders, Upper torso, Mouth, Nose, Eyes, Forehead. On the back view, labels include: Back of head, Neck, Back, Elbows, Upper arms, Lower back, Hands, Fingers, Glutes, Calf, Bottom of feet. The labels are placed around the corresponding body parts in a clear, sans-serif font.

Appendix B

Third Party Observation Form

Subject Name: _____

In the last six weeks, have you observed any changes in me?

Physical: _____

Emotional: _____

Behavioral: _____

Energetic: _____

Other: _____

Appendix C

CONSENT TO BE PART OF A RESEARCH STUDY

You may be eligible to take part in a research study. This form gives you important information about the study. It describes the purpose of the study, and the risks and possible benefits of participating in the study.

Please take time to review this information carefully. After you have finished, you should talk to the researchers about the study and ask them any questions you have. You may also wish to talk to others (for example, your friends, family, or a doctor) about your participation in this study. If you decide to take part in the study, you will be asked to sign this form. Before you sign this form, be sure you understand what the study is about, including the risks and possible benefits to you.

1. GENERAL INFORMATION ABOUT THIS STUDY AND THE RESEARCHERS

1.1 Study title: The Effect of Conscious Breathing on Emotion and Energy Flow

1.2 Company or agency sponsoring the study: There is no sponsorship of this study.

1.3 Names, degrees, and affiliations of the researchers conducting the study:

Amy Heath, BS, CES, CWC, Graduate Student in Master of Arts in Holistic Health Studies at St. Catherine University

Heather Mashuga, BA, Graduate Student in Master of Arts in Holistic Health Studies at St. Catherine University

Ann Arens, BA, Graduate Student in Master of Arts in Holistic Health Studies at St. Catherine University

2. BACKGROUND INFORMATION

2.1 Study purpose: The purpose of this research project is to describe the effect of conscious breathing on emotion and energy flow.

2.2 Three people will participate in the research.

3. INFORMATION ABOUT STUDY PARTICIPANTS AND VOLUNTARY NATURE OF THE STUDY

Taking part in this study is completely voluntary. You do not have to participate if you do not want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

3.1 Your decision whether or not to participate will not affect your future relations with St. Catherine University in any way.

3.2 Who can take part in this study? The researchers will be using themselves as research subjects. They include: Amy Heath, Heather Mashuga, Ann Arens.

4. INFORMATION ABOUT STUDY PARTICIPATION AND PROCEDURES

4.1 What will happen to me in this study? You will receive two professional aura photo and chakra sessions, one at the beginning and one at the end of the six week study. These sessions will be performed by Annette Bruchu, a professional trained in aura photography and chakra imaging. You will participate in a professionally facilitated three hour group conscious breathing session in week one and five. In week three, you may participate in an optional individual two hour conscious breathing session. The sessions will be facilitated by Terri Peterson, SBF, TBF, ACPH, RPh. Following the first group conscious breathing session, you will follow a daily home conscious breathing practice that is designed by Terri Peterson, the conscious breathing facilitator. These daily practices will continue for the six weeks of the study. You will have a front view and side view photo taken, with feet shoulder width and hands resting at their sides, on the six Sundays of the study in order to capture visual evidence of your physical features throughout the study. The photographs are performed first to eliminate any influence from the body scan. You will complete a half hour professional guided audio body scan, on the six Sundays of the study. You will use the Mindfulness Meditations CD by Roberto Benzo, M.D., Disc 1, Track 2. Following the body scan, you will fill in the body scan diagram, on the six Sundays of the study. You will use the same body scan diagram, which follows the verbiage of the guided audio body scan. You may use any form of medium (ex: colors, symbols, etc.) to fill out the diagram, filling it in to your individual preference that reflects your body scan experience. The body scan diagram is completed last because it is a tool to capture and reflect the body scan experience. You will keep a daily hand written journal for the six weeks of the study in order to collect self-observational content on thoughts and perceptions related to breath, energy and emotion. You may write as little or as much as you would like, completing the entry to your preference. You will tell a family member or close friend that you are participating in this study, asking them to informally observe you throughout the study, and at the end of the study, to fill out a third party observation form.

4.2 How much of my time will be needed to take part in this study? Approximately 27 hours

4.3 When will my participation in the study be over? The study is over once data collection is complete at the end of six weeks on January 25, 2015.

5. INFORMATION ABOUT RISKS AND BENEFITS

5.1 What risks will I face by taking part in the study? What will the researchers do to protect me against these risks? The risks of this study are minimal, however due to the nature of this study, participation may cause psychological or physiological disturbances. The researchers plan to attend to this risk in multiple ways. You will sign

this consent form prior to the start of the study and will have the option to withdraw from the study at any point until data collection has been completed on January 25, 2015, without consequence. You may also choose to decline completion of any specific component of the data collection. Terri Peterson, a professionally trained conscious breathing facilitator, will provide the main conscious breathing sessions and prescribe the home breath practice. Terri holds certifications in Transformational Breath, Soul Breathing, and is an associate certified practitioner in Pranic Healing as well as an energy medicine practitioner and a Registered Pharmacist. You may ask the facilitator for resources, if necessary, and will be able to debrief about how you are doing at multiple check points with the facilitator, research class instructors, and with the other participants. You can also engage in ongoing self-care activities throughout the research project.

5.2 If I take part in this study, can I also participate in other studies?

The researchers ask for you to only focus on this study due to the considerable time commitment.

5.3 How could I benefit if I take part in this study? How could others benefit?

There are no direct benefits from this study.

Potential other benefits may be personal and/or scholarly. You may experience positive psychological or physiological effects from the conscious breathing practice and/or act of introspective observation. You may also receive positive benefits from the relational experience with the facilitator and/or with the group of subjects. The research has the potential to make a beneficial contribution to the academic literature as well as to the profession of holistic health practices.

6. NEW INFORMATION

6.1 If during the course of this research study we learn about new findings that might influence your willingness to continue participating in the study, we will inform you of these findings.

7. ENDING THE STUDY**7.1 If I want to stop participating in the study, what should I do?**

You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record.

7.2 Could there be any harm to me if I decide to leave the study before it is finished?

No, there will be no consequences for leaving the study.

8. FINANCIAL INFORMATION**8.1 Who will pay for the costs of the study?**

You are expected to pay out of pocket for the professional aura and chakra readings and facilitated conscious breathing sessions.

Financial costs include:

Aura and chakra readings: \$45 per session for a total of \$90

Professional Breathing Classes: \$60 per session for a total of \$120 (optional third session ranging from \$60-\$165)

Total out-of-pocket expenses: \$210

St. Catherine's University graduate students are provided funding opportunities through the Graduate Student Advisory Board and you have the option to use these dollars toward financial costs of participation.

8.2 Will I be paid or given anything for taking part in this study? No, you will not be paid to be part of this study.

9. CONFIDENTIALITY OF SUBJECT RECORDS

9.1 How will the researchers protect my privacy? The raw data from your personal journal will not be shared with other researchers. You will perform a within-case theme analysis (Creswell, 2013) on your own and share these results with the other researchers in order to perform the cross-case theme analysis. Since you will be using yourself as the research subject, you will have control over how the data is used and reported. If you would prefer to use an alias in the report, you may do so. The data will be kept by you. You may store the data in a format and location that you are comfortable with.

9.2 What information about me could be seen by the researchers or by other people? Why? Who might see it? The data will be kept by you. The data will be kept through May 31, 2015. After this date you may use your discretion as to whether or not you wish to destroy your personal data. Identifying data will be made available to other researchers for the purpose of the research project. The data will also be in SOPHIA, an online repository provided by the Libraries of St. Catherine University. Data may also be made available in future publishing and presenting opportunities.

9.3 When does my permission expire?

Your permission expires at the end of the study, unless you cancel by January 25, 2015.

10. CONTACT INFORMATION

10.1 Who can I contact about this study?

Please contact the researchers listed below to:

1. Obtain more information about the study
1. Ask a question about the study procedures
1. Talk about study-related costs
1. Report an illness, injury, or other problem
1. Leave the study before it is finished
1. Express a concern about the study

The contacts are:

Dr. John Schmidt, Chair of the St. Catherine University Institutional Review Board at jsschmitt@st.kate.edu and 651-690-7739

Carol Geisler, PhD. at ccgeisler@stkate.edu and 651-690-7789

Amy Heath at alheath@stkate.edu
Heather Mashuga at hbmashuga@stkate.edu
Ann Arens at awarens@stkate.edu

11. RECORD OF INFORMATION PROVIDED

11.1 What documents will be given to me?

Your signature in the next section means that you have received copies of all of the following documents:

- This "Consent to be Part of a Research Study" document.
- You may receive a copy of this form for your records.

12. SIGNATURES

Consent/Assent to Participate in the Research Study

I understand the information printed on this form. I have discussed this study, its risks and potential benefits, and my other choices with Amy Heath, Heather Mashuga, and Ann Arens. My questions so far have been answered. I understand that if I have more questions or concerns about the study or my participation as a research subject, I may contact one of the people listed in Section 10 above. I understand that I will receive a copy of this form at the time I sign it and later upon request. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

Legal Name:

Signature:

Date of Signature (mm/dd/yy):

Co-Researcher Signature and Date (mm/dd/yy):

Co-Researcher Signature and Date (mm/dd/yy):
